

# **ANTENATAL EDUCATION**

**GUIDELINES FOR TEACHERS**

**M. WILLIAMS and D. BOOTH**  
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**Antenatal Education**  
**Guidelines for Teachers**

# Antenatal Education Guidelines for Teachers

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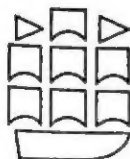
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## Foreword

Falling maternal mortality and perinatal mortality rates demonstrate improvements in the prognosis for childbearing. Obstetric and midwifery practice has helped with this improvement, though there are other factors such as housing, education and nutrition, as well as sanitation which may have made at least as large an impact on the physical results. As standards of care rise in obstetrics, it is right and natural that mothers expect more of the maternity services. One aspect of this increased expectancy is seen in the demand for 'natural childbirth', 'relaxation classes', 'psychoprophylaxis', 'preparation for childbirth'. It scarcely matters what it is called. Mothers want psychological help and support through pregnancy, labour and afterwards. They want to know what is going on. And they have a right to know for they are actively involved and not passive ciphers. Those who look after and care for childbearing women know how valuable it is for these mothers to be intelligently aware of their bodies and physiological processes, and for them to learn of relationships with their babies and husbands and other members of their families. In the present climate of opinion it is no longer necessary to defend antenatal education.

There is a problem, however, in arranging for education. It is time-consuming, needs small group teaching and continuous boundless enthusiasm from the teachers. In England and Wales there are over 700 000 births each year. Providing good education antenatally for all these mothers is a herculean task which requires a large work force. And this is no field for the enthusiastic amateur teacher, full of myths and prejudices, and with unswerving allegiance to hare-brained theories, hypotheses and 'systems'. The antenatal educator must be a professional with a balanced outlook and a deep knowledge of pregnancy, labour, babies and, above all, of human psychology and individual variability, and she must have qualities of perceptiveness, tact and sympathy.

The prescription for a good antenatal teacher is compounded of human qualities, knowledge and skills, the last being needed to project the message of helpful education. Education is not didactic

teaching. It is tailoring what is taught to the needs of the individual mother so that she may understand within her own intellectual capacity.

There have been many books and pamphlets on antenatal preparation, but none, until this one, which will teach the teachers. It is balanced and thoughtful and is based upon the extensive practical experience of both the authors. It is especially valuable for its survey of teaching methods and aims, and no antenatal educator can afford to ignore the wise advice given here on how to get information across to a disparate group, and on how to draw out such a group so that its fears, tensions, emotions and anxieties can be verbalised.

As befits two such excellent educators the book is without dogma. It suggests and hints and subtly makes the reader *think* about the whole of antenatal education, whilst at the same time it offers really practical advice. I would like it to be read and understood by all with pretensions to antenatal teaching, for then its enlightened and humane philosophy will be disseminated to thousands of women who will benefit.

London, November 1973

PHILIP RHODES

## Preface

The perfect antenatal teacher would be a midwife, a health visitor, a physiotherapist, a psychologist and the mother of six children all born in different ways in different places. She would be something of an actress, a great enthusiast, have a deep interest in young people and a sense of humour. Such paragons do not exist, teachers are ordinary people who try to make the best use of their professional expertise and their life experiences. They listen to and learn from their students, the parents, and supplement their knowledge by discussion with colleagues and wide reading.

Teachers discover early in their first series of classes that it is one thing to acquire knowledge for an examination, quite another to pass on that knowledge to a group of people who have different backgrounds and need the information for a different purpose. They must be sure of their facts but able to differentiate clearly between facts and their own personal beliefs. This book has been written for those who have the required knowledge in one or other aspect of the work in an attempt to guide them in the use of it in helping parents to understand childbirth and their reactions to it and to encourage them to make up their own minds what is best for their baby and themselves.

Some new teachers may have a mainly clinical background in which case they need to observe and read more about the hopes, thoughts and fears of pregnant women, others having recent personal experience of childbirth may need to return to a more objective and professional outlook. Since at present there is no one full training which covers all aspects of antenatal education it is hoped that teachers will read about the aspects with which they are less familiar and may, perhaps, feel more competent to stand in, in the absence of a colleague.

Everyday language has been used throughout the book; more technical information will be found in other books listed in the bibliography. As methods of teaching depend so much on the personality of the teacher and a recapitulation of our full teaching programme would have been both lengthy and tedious, only

guidelines and some check lists have been included. However, certain subjects which some teachers find difficult to put into words have been treated more fully. These passages of direct speech are shown in closely-set lines of type and may be useful until the teacher learns by trial and error to phrase them in her own language.

The information about books, equipment and audiovisual aids was correct at the time of going to press but, as prices fluctuate, will need to be checked by each teacher.

Teaching and group leadership are vital skills, we have therefore chosen to describe the educators as teachers or leaders rather than by their qualifications.

London, 1974

MARGARET WILLIAMS  
DOROTHY BOOTH

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We also express our gratitude to our friends and colleagues, who have shared their ideas with us over the years, and especially to our antenatal class members, from whom we continue to learn.

If inadvertently we have used any teaching examples from sources we have not acknowledged we apologise for the omission.

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## CHAPTER 1

# The Aims and History of Antenatal Education

Men's and women's knowledge about childbirth and their attitudes towards birth and parenthood are conditioned by many factors. First, they are conditioned by their own parents, whether they have been loved and supported by them, yet freed as they grew up to develop along their own lines. Their attitudes are affected by how they have been disciplined, what they have observed and been taught about handling the situations arising in family life. Daughters may have learned that pregnancy is a normal consequence of marriage, the birth of a child a joyous achievement and the caring for that child a valued contribution to society. Equally, they may have learned that pregnancy is something that happens when you 'go wrong' or 'don't take care', birth is a painful and degrading experience and parenthood is of negligible value compared with other activities. Sons may have absorbed the message that bearing and rearing children is women's work and that men have more important things to do. These attitudes are further modified by other members of the cultural group who produce and talk about babies.

The next factor is more formal education, whether this comes from school, books, magazines or broadcasts. There has been a tremendous change in the last few years in the frequency with which birth is discussed and illustrated by the mass media, but this is coming more slowly in the schools. Nuffield science courses are improving the situation, but school biology still too frequently stops short at the rabbit or, at best, slides rapidly over human reproduction; it is rare to find a course which includes the emotional aspects and sensations of childbirth. In some schools parentcraft classes may offer valuable advice on bathing and caring for a baby but neglect opportunities for wider discussion on the responsibilities of parenthood, particularly in boys' schools.

Finally, there is the personal interaction of the man and woman who conceive the child, perhaps as a planned and eagerly awaited fulfilment of their love, but perhaps as an unplanned 'mistake' which may offer a threat to an already unstable relationship.

## AIMS

Teachers can observe and listen to these parents, trying to understand their differing attitudes and perhaps help them to understand how they have arisen. They can try to reinforce what they believe to be valuable and positive attitudes and to modify those that are less desirable. It is unlikely, however, in the few short weeks of an antenatal course that they will completely change beliefs that have taken 20 years to establish.

On being told that she is going to have a baby, a woman may be thrilled, distressed, confident or frightened or a mixture of all four. She rarely tries to analyse her feelings or to wonder how they have arisen. She is usually content to seek medical care and to make plans. She may be offered a course of preparation; what then do those who accept the offer hope to get out of the classes?

In a small survey of 50 pregnant women in 1967, in Surrey, it was found that 100 per cent gave 'the desire to learn more about labour' as their primary reason for attending classes. We have had this view confirmed by informally questioning hundreds of other mothers. The fathers want to know when they should take their wives to hospital or send for the midwife, and what they should do if the baby is born suddenly when the couple are alone. If one enquires a little more deeply what the women want to know they will often say 'it's not only the process of labour but how it will affect me, what they will do to me and how I can help myself and those who are looking after me'. Similarly if the father intends to be present, he also wants to know what to expect of his wife and her attendants and particularly how he can help them.

Once assured that labour will be fully dealt with in the course, then women will ask for more information about pregnancy and the puerperium and more particularly about their babies. They seek help in understanding their bodily changes and emotional swings, in keeping as well and happy as possible during pregnancy, and in achieving full rehabilitation and fulfilment afterwards. Some want to know more of the development of their babies in utero, others prefer their own picture of events. Discussions on feeding and living habits planned to give the baby a good start in life, his appearance, and his needs for love, and food and warmth are very popular subjects for discussion. The whole group likes to meet a young baby and exchange ideas with its mother.

Multigravid women come to classes either in the hope of achieving a better experience with another birth or because, having found a preparation course helpful during a first pregnancy, they wish for a refresher course. Some also seek help in planning their daily activities with a growing family and more particularly with helping another child to accept the new baby. They find it therapeutic to be able to relive their early days with their first babies thus helping primigravidae in the group to imagine their coming excitements, tiredness and ambivalence, and by sharing their experiences of this challenging period the multigravidae realise that they have changed and matured, and that for them their 'apprenticeship' is over.

During a first pregnancy a woman has to face tremendous changes in her life style. She will probably, at least temporarily, give up work, with its earnings, companionship and satisfactions and be restricted to her home environment where she may have no friends in the immediate neighbourhood. She and her husband will soon no longer be carefree young lovers responsible largely for themselves alone. The wife at least faces a seemingly complete loss of freedom and both are about to undertake the responsibility for the health and happiness of another human being, who appears fragile, utterly dependent and infinitely demanding. These parents often express a need to meet others undergoing similar experiences and wish to become part of this new peer group. They want to talk about their feelings and plans to one another and to a group leader who has preferably herself had the experience of childbirth and has both the time and a true wish to listen to them.

### Summary of Aims

These, as we see them, are:

1. The gradual building up of confidence in each woman in herself and in those who are looking after her; confidence acquired through knowledge, an understanding of her own reactions, and the ability to trust and control her own body.
2. To help her to have a healthy, happy pregnancy: healthy not only for the sake of the child but also so that there is a good basis for speedy physical rehabilitation postnatally; happy in looking forward with joyful anticipation (even if with a little apprehension) to the birth.
3. That in labour she feels physically and mentally prepared for the

reality that she meets and achieves a satisfying experience within the context of safe maternity care.

4. To provide a group whose members can air their thoughts and problems and work towards adjustment in their life styles.
5. To begin to prepare for the physical and emotional care of the baby. It is hoped that in the family setting fathers will share in the preparation either indirectly through their wives' influence or directly by attending those parts of the course which are open to them.

### **The Teachers to Achieve these Aims**

In hospital, even if the antenatal teaching is shared by midwives, physiotherapists, doctors and others, the achievement of common aims should only be a question of communication and mutual respect; teachers working in local authority and private classes have a more difficult task when trying to fulfil their roles as part of the team. Efforts to instil self-confidence in the parents must never be made at the expense of confidence in those who are responsible for the well-being of the mother and baby. If a teacher can become known to the hospital staffs in the area and use tact and diplomacy, mutual trust and understanding will grow. She will keep in touch with new methods and procedures and in her turn may be able to offer pointers about the home conditions and possible reactions among the parents in her groups. It may be possible to arrange that part of the course, perhaps a visit to the labour ward or a father's evening, is held in the hospital. One such class is described in Chapter 9.

## **HISTORY**

### **Early Beginnings**

Since the mid-nineteenth century attempts have been made in this country to carry out various parts of these aims. Preparation for the care of babies began in 1862 when the Ladies Health Society of Manchester was formed from women who had successfully reared a family and were willing to go from house to house offering advice on, among other things, the care of children, and the feeding, washing and clothing of babies. Other towns followed Manchester's example and began to employ 'health visitors'. In 1946 the National Health Service made mothercraft classes possible all over the

country and health visitors were specifically given the task of advising 'as to the care of young children and expectant and nursing mothers'. Classes spread and the content widened and altered with new understanding of the needs of pregnant women. Margaret McEwan, writing in *Health Visiting* (1957), says that 'The teaching in the past has been mainly on physical health and mothercraft. Now the importance of teaching on mental health and the importance of family relationships is fully recognised.' In practice it seems that these aspects of the work are more often neglected. Since health visitors' duties in other fields have recently been enlarged, and they are no longer required to hold the Part 1 midwifery certificate, midwives are playing an increasingly large part in antenatal instruction outside the hospitals.

Ideas about antenatal preparation for labour came somewhat later. In 1912 Dr J. S. Fairbairn was in charge of the obstetrical department of St Thomas's Hospital, London, where Miss Minnie Randell, a nurse, midwife and physiotherapist, was principal of the school of physiotherapy. They established a physical routine to restore postnatal health and began to work towards an antenatal regime which would promote physical health during pregnancy and help towards an easier labour. Together with Dr Kathleen Vaughan they devised talks, relaxation practice and a series of exercises to increase the flexibility of the joints of the pelvis and postures for use in labour to facilitate the descent of the baby. But Randell wrote as long ago as 1949 'the women should understand that harmonious interaction of the mind and body is essential in childbirth and that training of the muscular system goes hand in hand with training of the nervous system in order to preserve this harmony' (Randell, 1949).

### **Dick-Read's Influence**

From the 1930s onwards Dr Grantly Dick-Read exercised a great influence on antenatal education. He believed that birth in the normal woman, being a natural physiological function, should not give rise to pain. Civilisation and culture, however, have brought influences to bear upon the minds of women which mitigate against the smooth working of their natural functions and introduce fears and anxieties concerning childbirth. In labour these fears trigger off the natural protective mechanisms of the body, giving rise to tensions not only in the mind but also in the body, notably in the

circular muscles of the cervix. Resistance of these muscles to normal dilatation causes pain and so more fear, hence the vicious circle of fear, tension, pain is established. Dr Dick-Read's method of alleviating fear was through wise instruction about the changes and sensations to expect in the body and an analysis of the probable changing emotional reactions culminating in the excitement and fulfilment of birth. He had very little use for any general exercise regime, but taught deep relaxation and deep slow breathing to overcome tension during the first stage of labour, followed by controlled effort during the contractions of the second stage, interspersed with relaxation between contractions. He laid great stress on the personal interest of the physician in the training and on his presence to implement it during labour.

Helen Heardman, a teacher of physiotherapy, used ideas both from the St Thomas's school and from Grantly Dick-Read. In addition to more technical books, she produced a small booklet for mothers explaining in simple terms the fear, tension, pain syndrome and suggesting methods of combating it, and this has been widely used in English-speaking countries (Ebner, 1968).

'Preparation for childbirth' classes in this country have therefore grown from two roots: parentcraft, slanted mostly towards the care of the baby, and theoretical and practical preparation for labour. In many centres, such as University College Hospital, London, good, well-integrated courses were developed and have been running for years; in others, the inspiration and enthusiasm of the pioneers had been watered down and become ineffectual. The advent of psychoprophylaxis has encouraged many people to make a new appraisal of their courses and to search for better methods of preparation and support of parents.

### **Hypnosis**

During the 1940s observations were being made in England and some European countries, particularly in Russia, of the effects of hypnosis in childbirth, and favourable results on the suppression of pain were achieved. However, this method was not applicable to large numbers, and had certain other disadvantages. In 1949, Velvoski, a neuropsychiatrist, and some of his obstetrical colleagues described a new method which they called 'psychoprophylaxis', which attempted to overcome the disadvantages of hypnosis by offering a form of active mental preparation to groups of women.

### Psychoprophylaxis

This method was based on the concept that reflex actions of the body can be conditioned by differing stimuli. Pavlov demonstrated that dogs, conditioned to expect food by the ringing of a bell at the same time as food was presented to them, would soon salivate at the sound of the bell, even if they could neither see nor smell food. Velvovsky and his colleagues put forward the idea that the child-bearing woman was conditioned by hearsay to associate labour with pain, therefore when she experienced any new stimulation from her uterus in labour, these sensations were signalled to the brain and immediately interpreted as those of pain. They set out to 'de-condition' these harmful verbal associations by education about normal pregnancy and birth and by constant assurance that 'labour pain is not an inborn attribute of women or an inalienable element of normal childbirth' (Velvovsky *et al.*, 1960).

Another principle of the preparation was the use of activity to raise the pain threshold. Patients were taught to associate special kinds of breathing and self-massage with the onset of contractions, and they found that, in labour, these 'useful stimuli' were often strong enough to cut out painful stimuli. The women were taught that the human brain responds to messages like a complicated telephone switchboard, which can only handle a certain number of incoming and outgoing messages at once and will register preferentially the ones considered most important, blocking others which would distract or interfere. The teaching had to be precise, and the women had to practise daily what was taught in class to build up the habit of the 'correct response', and to be able to concentrate on that response to block painful sensations.

In 1951, Dr Fernand Lamaze, of the Clinique des Metallurgistes in Paris, visited Russia and was very impressed by what he saw of this new teaching, named 'psychoprophylaxis' or 'mind prevention'. He began to use the techniques in his own clinic, and soon his methods were discussed throughout France, where they were called 'accouchement sans douleur'. Lamaze taught different kinds of response to uterine contractions, namely, rapid shallow breathing over the height of late first stage contractions to prevent diaphragmatic pressure on the uterus, and a form of localised relaxation which he called 'decontraction', to prevent other muscles, particularly those of the abdominal wall and pelvic floor, contracting in association with those of the uterus.

Doctors, midwives, physiotherapists and health visitors from many parts of the world visited the Clinique des Metallurgistes and observed the work of Lamaze and later of his associates Vellay and Hersilie. Some, like Erna Wright who at that time was teaching at the National Childbirth Trust, accepted the whole doctrine and set out to spread it by means of lectures, seminars, and a popular book *The New Childbirth*, others used parts of the method and built it into their own. Such a mixture is anathema to the purists but some major differences already seem to have arisen between different schools of psychoprophylaxis; for example, the French still insist on the validity of the title 'accouchement sans douleur' while the Russians have 'considered it wiser not to stress the pain factor in their new nomenclature' (Chertok, 1959).

Many proponents of psychoprophylaxis, though paying tribute to Dick-Read, believe that their method is completely new and different. They say that Pavlovian explanations of cortical conditioning offer a much more scientific explanation than Read's 'fear, tension, pain' theory, and that 'he gives the woman a passive role through dilatation while psychoprophylaxis gives her as much activity as possible throughout labour' (Vellay, 1959). Dick-Read stressed the time and patience required by the physician conducting a 'natural childbirth'. Heardman or one of her associates was present at most of the labours of her trained mothers. Vellay uses professional 'monitrices', and other obstetricians train fathers to act as 'labour coaches'. The Russians and others have tried to secure informed support for their prepared mothers by training courses, not just for those responsible for the preparation, but for the *whole* staff of the unit, lasting in the case of doctors for as long as three months. It is this involvement and enthusiasm of *all* who work with the parents that seems to characterise successful labour preparation; Lee Buxton (1962), an American obstetrician who spent a year studying various methods of psychosomatic preparation, remarks that he finds this of more importance than differences in methodology.

It should be noted that psychoprophylaxis is essentially a preparation for labour, and stops short at the moment of delivery; postnatal rehabilitation of the mother and care of the baby are not considered to be part of the course. 'Puériculture' in France is either a completely separate antenatal course, or classes are held in the maternity hospitals immediately after confinement. In England,

owing to the increasing tendency towards early discharge and to pressure of work in many maternity units, attempts are being made to put more emphasis on this aspect, particularly on the mental health side, into the antenatal classes.

### **Later Developments**

Another development, common to other forms of education, which has been marked during the last few years has been a move away from authoritarian teaching to a much greater involvement of the group as a whole. Members are encouraged to discuss their feelings, to evaluate their attitudes, and to make up their own minds about their actions, providing these do not conflict with their own or their babies' safety. This trend has been encouraged by the influence of parents' associations such as the National Childbirth Trust in the British Isles, the International Childbirth Education Association in the United States and the Parents' Federation of New Zealand, and by such teachers as the social anthropologist, Sheila Kitzinger (1972).

### **Classes for Both Parents**

A further development, begun in America by organisations such as the New York Maternity Center, and individuals, notably Dr Robert A. Bradley, of Denver, Colorado, has been to encourage husbands to attend not one or two 'special' classes arranged for them, but to be deeply involved in the whole course of teaching. This means that, throughout the course, they are learning with their wives, and practising ways to support and help them in labour. Several classes have now been started in this country on similar lines, and are proving to be very successful. It means, of course, that both the teacher and the couples have to be prepared to give up evenings for this, and one can imagine that a teacher with, for instance, a busy family life and small children, could find it difficult to do so. Husbands also may be tired at the end of the day. The most successful classes seem to be where the teachers are a husband and wife team. The people who are now involved in this type of class say that it is not difficult when one husband, for instance, cannot arrive at a class: another husband simply helps two women instead of one, quite naturally and easily.

### Classes for Multigravidae

Another type of very informal class, with which one of us is involved, is a group discussion, with multigravidae who have previously attended a full course, and need reminders, reassurance, and encouragement to practise. This class is in a room attached to a busy general practitioners' antenatal clinic, and mothers, with toddlers, gather before and after their appointments for as long as they wish, to discuss with the teacher and the others, any problems, modern trends, or recent developments in the hospital, and to rehearse relaxation and breathing techniques again.

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## CHAPTER 2

# Teaching Techniques

Teaching is a form of communication. The techniques that we use are therefore all designed to achieve understanding between ourselves and the members of our classes, whether we are describing the course of labour, trying to help a woman to explore the way her body works, or discussing her feelings towards her baby. When planning a course we need to define its purpose, consider its content, organise the material, decide on the mode of presentation, and evaluate the results (Beard, 1970).

The broad aims of antenatal education were discussed in the previous chapter. When further defining their purpose we need to break down each of these aims into smaller teaching projects, then think clearly how we can 'put over' each of these. This is not a once and for all decision, but the questions we set ourselves and the answers we find will change continually as our understanding of parents' needs increases. It is, however, fatally easy to accept some part of another teacher's programme and incorporate it into one's own, without applying the aims test sufficiently carefully. This is particularly true of exercises—one watches an attractive exercise and one is apt to try it out on a class without thinking exactly what it is supposed to do.

### **The Use of Different Techniques**

At present it seems that the needs we have stated are best met in three ways: by talks, discussion, and physical education. Different teachers may specialise in any one of these techniques but the triangle should have approximately equal sides as far as the time spent on each aspect is concerned.

We are lucky that most of our mothers, though perhaps fewer of their husbands, are highly motivated towards classes and are therefore a very receptive group. On the other hand, we may have in the groups individuals with widely differing educational and cultural backgrounds, and must somehow stimulate and hold the interest of each one of them. The attention span even of a university student at a lecture is said to be not longer than 20 minutes. In our

classes it may well be no more than 10 minutes, but we can remain in communication longer if we teach our students through their eyes, hands and bodies as well as through their ears. A wise educational maxim says, 'I hear and I forget, I see and I remember, I do and I understand'. The attention of a class has a wave-like form—it starts high, wanes, then recovers, so that it is a good idea to put the most important points at the beginning and end of the talk. Even in an informal teaching situation, where questions and discussions are encouraged during a talk, there must be a framework of order, otherwise the teacher finds that important points have been left out and the class is not clear what it has learned. One is reminded of the negro preacher who on being asked how he was able to attract such large congregations replied, "I tells 'em what I goin' to tell 'em, I tells 'em, then I tells 'em what I told 'em".

## TALKS

### **Organisation of Material**

If one is planning a course it is tremendously helpful to spend some time listening to similar classes given by an experienced teacher, not only to hear what subjects she chooses and how she 'puts them over' but also to observe reactions in the audience, what catches their interest, what makes them fidget, what questions they ask. Having planned the subjects for one's own talks one must keep in touch with modern developments, whether this involves reading the latest catalogue of maternity wear and baby equipment or visiting the labour wards. If one is working outside hospital then it is essential to visit those units which members of the class will attend, getting to know the staffs and be known by them, and keeping informed about the latest procedures. One must also attend meetings and read widely around the subjects, not only in up-to-date textbooks but in the popular press, and watch relevant broadcast programmes since it is these which will stimulate questions. It is said that a lecture is like an iceberg, the seventh part which is above the water is actually used in the talk, the remaining six-sevenths is below and is the background information which may be uncovered by questions and discussion.

Suppose the subject for the first talk is to be the changes of early pregnancy; the material is carefully selected and sifted, remembering always that we are not trying to train medical students nor

midwives but to help a mother through the experience of pregnancy, so that everything must be relevant to *her* baby, *her* body, *her* sensations and *her* emotions. For example, a long dissertation, actually overheard at a recent class, on the exact methods of transfer of nutritive substances by diffusion through the walls of the chorionic villi in the placenta, obviously bored the women to tears, but a discussion of the foods to eat which would keep their babies healthy would have held their interest.

### Choice of Words

Words and images must be chosen with great care. One is between the Scylla of a too technical presentation and the Charybdis of talking down to one's audience. If, as so often happens, the teacher is a woman, the group will identify with her more readily if she talks about '*our* bodies behaving in such a way' rather than '*your* bodies'. It is important to include some medical terms because the women will overhear these in clinics and hospitals and may puzzle over them. Also, knowledge of the right words gives them a pleasant feeling of competence and will stand them in good stead when they come to educate their own children. However, it is better not to presuppose knowledge, and terms like uterus and placenta should always be prefixed by the lay terms womb and afterbirth. One must also remember that some common midwifery expressions can be frightening to lay people: for example, a woman was reduced to tears by overhearing two students say that her baby's head was still 'free'.

Verbal pictures can be very helpful, but they must always relate the unknown to the known, the simile of the baby fitting into the pelvis like an egg into an egg cup is meaningful to most people, but the description of coping with a contraction like riding a wave on a surfboard is not going to mean anything to a group of Indian women who have rarely seen the sea. A knowledge of the cultural background, and ideas about childbirth current in the community from which the mothers come is therefore essential, and a readiness to change images if one is met with a blank stare. Examples taken from personal or professional experience enliven a talk, particularly if these are spiced with a type of humour which is acceptable to the group.

### **Preparing the Talk**

Having prepared the material, and thought out the images and examples, beginners will find it helpful to write the talk out in full and, in a room alone, read it over fairly slowly, timing the length in two or three readings. If a tape recorder is available this is an excellent way of judging the effectiveness of the talk, and correcting any irritating voice mannerisms. When the content is reasonably well known, key words or phrases are underlined in red. When reading through the next time, the eye should try to focus only on the underlined words, getting the flow of the rest from memory, and not attempting to recreate the speech exactly as written. The underlined words can be transferred to a small card, and the talk again rehearsed. The small card is then the only 'memory tool' necessary. To give confidence, the first sentence of the talk can be written at the top of the card, but with sufficient rehearsal, even a diffident speaker can give an interesting talk, if she herself feels the subject to be important and meaningful. It will soon become possible to give the talk from memory, then the problem arises of introducing subtle changes to make it sound fresh and spontaneous.

Another method is to jot down headings as they occur to one, put them in order, then talk to oneself about them, trying out various ways of expressing the points, finally noting sufficient words or phrases to recall the flow of the talk. This has the advantage that the ideas are expressed in spoken rather than written English from the beginning. There is a lot to be said for letting a talk lie fallow in one's subconscious mind for several days and trying out the occasional phrase, perhaps while doing something quite irrelevant, before committing anything to paper. Appropriate audiovisual aids (see Chap. 3) are then chosen and put ready. Alternatively, if the talk is a commentary on a series of slides or a film it is better to project these and build up the verbal explanations around them.

### **Presentation**

All are frightened the first time they have to speak in public no matter whether they are going to deliver an hour's lecture or spend one minute proposing the acceptance of a report. They feel that they may be exposing themselves to ridicule, aggression, or even humiliation, like a child that has annoyed its parents. Even the experienced speaker is slightly nervous before giving a talk, particularly if the subject or type of audience is not his usual one.

Some degree of nervousness should be welcomed since it stimulates adrenaline production, makes the speaker more alive and interesting, and increases her sensitivity and therefore her communication with her audience. Lucky people cut their teeth (or perhaps 'grow their speaker's tongues' would be a better metaphor) in some informal committee, but others may suddenly be told that they must give a talk on a certain subject to a selected group on a certain date. The answer lies in meticulous preparation and it is hoped that the early part of this chapter may be helpful.

### **Further Preparations**

Some further preparations of the room are needed just before the class assembles (see Chap. 4). It may be necessary for the teacher to wear uniform, but ordinary dress creates much less of a barrier between herself and her audience, particularly if it is quiet in colour and style but sufficiently up to date to give confidence among a group of critical young women. Slacks, or tights and a loose skirt, are essential if the teacher is also going to teach exercises, but, even if she is not, she will often need plenty of freedom to move, for example to demonstrate the bony points of the pelvis on her body. Face and hair should be checked just before entering the room and then can be forgotten.

Self-confidence and complete ease of manner only come with practice, but given a knowledge of the subject and a real interest in the audience, not just in their medical histories, but in themselves as women, most speakers can make a 'good job' even of their first classes. As the teacher's confidence grows so will that of the group. The essential factors are a belief in the value of what one is talking about, and a deep interest in the problems and joys of young parents. In our opinion teachers without this enthusiasm should never be asked to take antenatal classes; the people in them are far too sensitive to atmosphere.

### **Use of the Voice**

How then do you express this interest and enthusiasm? First, you use your voice to its best advantage so that you sound as if you find the whole subject fascinating. It is to be hoped that you have already practised with a tape recorder or on long-suffering colleagues so that you know that your voice is well modulated, neither too quick nor too slow, too low nor too high, and is free

from 'ers and ums'. Verbal punctuation is important, a pause between sentences, a change of speed, or stress on one particular word, all add to the interest of a talk. A great deal can be learned by listening to actors on television or in the theatre with these points in mind. Some amateur dramatic training is a great help to an antenatal teacher and even such exercises as stressing different words in a sentence and noticing the differing meanings which result can be helpful. Try stressing in turn each of the words in the following sentence: 'I never said he stole that purse'.

### **Non-Verbal Communication**

To express and generate interest you must also remember that you are not just talking *at* people but trying to communicate with them. It is very easy to fix your eyes on your notes or on some particular member of the class who seems sympathetic, resulting in the rest of the class feeling left out and the unfortunate recipient of your glance wondering if a bra strap is showing. So, you turn your head, looking from person to person so that everybody feels she is important; note the general reaction. Do they look interested or are they asleep, fidgeting or yawning? If so, can you make a change, show an interesting picture, ask a question, try out an exercise? After experimenting for a bit it can be very helpful to ask a colleague to sit in on a class and make honest comments, particularly about any irritating mannerisms of which you may be quite unconscious. A few months ago one of us was in this situation and was asked if she knew that she crossed one leg over the other very firmly every time she came to a vital bit of her discourse.

### **Questions**

One of the tests of a good class is the number and variation of the questions put, and the amount of discussion which arises. It is usually best to encourage people to ask questions as soon as they occur to them, to watch for the puzzled frown or the mouth half opened to comment and, indeed, it is a good idea to pause frequently to ask 'is that clear?' or 'would anybody like to say something about this point?'. If the thread of the talk is temporarily broken one can always ask the women to recall the last point, so encouraging feedback from them. Usually, no question asked in class is academic; the woman has some personal reason for asking, and one must be careful not to answer in a facile or quick manner,

but to try to see any other meaning behind the question. For example, a woman in class asked how long was the umbilical cord. I could have said 'about 18 to 28 inches' and passed on, but I then asked how many had heard the nonsensical old wives' tale of the cord getting round the baby's neck if a woman put her hands above her head, continuing with the reassurance that, if the baby happened to get the cord round his neck, the midwives had a simple technique to deal with this after the birth of the head. A discussion of other old wives' tales followed, with the class seeming enormously relieved to get them explained, and to know that most of them had been somewhat worried and half-believing, even of the oddest tales. Later, the woman who had asked the original question said that her grandmother had seen her hanging out clothes, and had told her she would strangle her baby by doing so. This is a simple illustration, but serves to warn all teachers to be sensitive when dealing with any question, and explore for the hidden question behind the one which is asked. Nobody is omniscient and there will certainly be questions which I cannot answer; I admit it freely, promise to find out and *keep* that promise the following week.

### INDIVIDUAL COUNSELLING

Even in the most relaxed class, some women prefer to ask their questions when alone with the teacher, and she should make herself unobtrusively available before and after class and during coffee breaks. She should also be prepared to suggest a time when she would be free for a longer private chat with one or both parents, either in a small room or on the telephone. The request for a private talk may come from the teacher herself if she thinks this may be helpful to a woman who seems worried. In these circumstances it is so easy to jump in with advice or an explanation that we think will allay fear, much more difficult to keep silent and listen. Listening has truly been called the lost art of this age. One needs not just to recognise the sounds that come out of another person's mouth but to try to understand the meaning that underlies her particular choice of words, her hesitations and gestures. One should realise the prejudices which these words may be arousing in oneself and suspend judgement until the other person's point of view is thoroughly expressed. It may help to put a question, such as 'Do you mean that?' or show one's attention by rephrasing a

sentence and asking, 'Have I got this clear?' but basically one's function is to be a sympathetic listener.

Some teachers make an individual interview with one or preferably both parents part of their course. This may be the only way to help a foreigner who has little command of English. Sometimes the husband or a friend can act as interpreter, and most of the teaching has to be done visually and through touch. For example, the teacher can demonstrate relaxation with her own body.

### GROUP DISCUSSION

Human beings are sociable animals. Each of us belongs to a number of groups and interacts in different ways with other members of these groups. To quote Klein (1961) 'The individual needs his group's assurance that he is valued, he gains it by behaving in a manner acceptable to the group; and when he does this he gives to others the same assurance of individual worth which he gains from them'. When women become pregnant, especially when that pregnancy becomes obvious to others and it is a first pregnancy, they often feel the need for membership of a new group. They are no longer carefree young lovers but are continually reminded of coming responsibilities which their friends may not yet have undertaken. Particularly if the couple have recently moved, the parentcraft class may supply the friends and support which they need. They may join the class in search of information from the teacher, but stay because they look forward to exchanging ideas and experiences with the rest of the group, who have a tremendously strong bond of interest.

Listening to a talk can be a completely passive learning experience—indeed, it can flow over an audience leaving little behind—but involvement in a discussion is active and encourages thought. Group members will often enlarge upon or reinforce the teacher's experiences using different words which will be remembered. There is a consensus of opinion among educationalists that discussion is better than formal teaching for changing attitudes. Problems which might be embarrassing in a two-person relationship can be discussed very generally in a group, and no one need feel that she is under attack since no one needs to acknowledge that the problem is hers. Members of a group are comforted when some problem they had thought peculiar to themselves is brought to light and proves to be

quite a common experience. This aspect can be particularly helpful to the shy woman who finds it difficult to ask questions or express her feelings. Some women are relieved to hear about another's worry which does not bother them, and take pleasure in supporting the worried member of the group.

From the leader's point of view, group discussion is a fascinating but far from easy method of teaching, for it involves the teacher in a change of role. 'She deliberately withdraws from being the focus of attention, and her efforts are directed towards encouraging interaction among all the members, this includes herself but not as the dominating member' (Abercrombie, 1970). She can find out how much the group knows and whether the information has been given at approximately the right speed and depth. She can observe the interaction within the group, and may be alerted to some particular difficulty or problem; for example, an undesirable attitude towards some other member of the antenatal team or ambivalence towards the coming baby.

### **Preparation of Material**

Discussion may start spontaneously at any time during the class, and one of the benefits which arises from the type of class that we have been describing is that time is always allowed for it. On the other hand, it may be desirable to base the discussion on a prepared talk, filmstrip or film. Other ways of giving impetus to a discussion are to invite a previous member of the class to come back for a visit with her baby, to read a labour report from an ex-class member, to listen to a tape or record or to ask a thought-provoking question. 'With what do you associate the word pain?' is a good way of starting an interesting interchange of ideas on that subject. Whatever way is chosen, the group leader must think carefully about her introduction and read around the relevant facts. She should be familiar with any material that is presented, including the labour reports, so that she can explain and discuss any difficulties that may have arisen.

### **Management**

The group of perhaps 5 to 15 is best arranged in a compact circle; the participants either sit on chairs or on cushions on the floor with their backs comfortably supported against the walls, close enough together so that gestures and expressions are easily visible. Research

has shown that the leader is more readily accepted as a member of the group if her chair or cushions are exactly the same as those of the class, and equidistant from the others. She may answer factual questions, but must remember that the object is not a dialogue between herself and one member of the group but an interchange of views between different members, so that the less she speaks the better. An expression of opinion can be 'batted' around with 'What do the rest of you think about this?' or even 'How do you feel about that one, Mrs. J.?'. It is very helpful to have several people in the group who are already parents; if there are no multigravid women, then visitors, colleagues, even projectionists can be involved and the women pregnant for the first time will have mothers, sisters and friends who have talked about their experiences.

The leader should greet each contribution with a smile or a glance, to express approval. It is surprising how even experienced group leaders sometimes show more approval towards one participant, and one knows how damaging this can be to the others' self-esteem. The object is to involve as many people as possible, and the shy can sometimes be encouraged to speak by a skilfully timed open-ended question, that is, one that asks for an expression of opinion rather than a yes or no; but in our opinion if people do not wish to speak they should be left in peace, and they may well talk things over with their husbands when they get home.

### **Keeping Control**

Fortunately there is rarely any difficulty in persuading groups of expectant parents to talk. The opposite is more often the case: how to get them to stop. If the group members wander along side paths they should be allowed to go if this is obviously proving therapeutic to them, even if it means omitting some of the points the leader intended to raise; she can make a note of these, raise them later or add them to the next talk. Some discipline is required, though it must be of the 'iron hand in the velvet glove' variety. One woman must not be allowed to monopolise the group—the woman who cannot resist the telling of horror stories is a case in point; if a change of subject or a glance does not stop her, then it can be suggested that she might like to come and talk things over with the leader privately. Nor must the group be allowed to splinter so that several different conversations are going on at the same time; these can be left for the tea break. Finally, it is better to disperse the

members of a group while they are feeling alert and talkative and will go on with the conversation while they are changing or walking home rather than prolong the discussion until they are dull and 'talked out'. Before saying goodbye, it is often helpful to sum up the different viewpoints if these have been controversial, or, if not, to give the consensus of opinion so that participants can think it over during the week.

## NEUROMUSCULAR CONTROL

We have now considered two sides of the preparation-for-childbirth triangle—talks and discussion—the third side of which is the teaching of neuromuscular control. This lengthy synonym has been chosen advisedly instead of the simpler term 'exercises' because the intention is *not* simply to give the mothers a series of movements once a week but to build up their 'body awareness' by a progressive scheme of training extending over the full course with much encouragement to practise at home. We are trying to improve their sensitivity to incoming messages from their skin, muscles and joints, to code them and to send out appropriate replies. For example, the balance of the body changes considerably during pregnancy and unless a woman is made aware of this and helped to realign her spine she leans further and further back until she achieves the true 'drummer boy' posture.

### Relaxation

Some teachers rely on verbal imagery to describe the required sensations of bodily ease; for example 'Imagine your leg is getting heavier, or warmer, or your body is spreading outwards or you are floating on water', these suggestions usually being given in a very calm, soothing, monotonous voice. Others prefer a more matter-of-fact approach and concentrate on teaching the brain to appreciate the sensations which arise during various actions of the body. Laura Mitchell has given us the following description of her 'physiological relaxation', based on the physiological laws governing muscle action.

'The human brain acts like a computer. The output in muscular activity depends upon what information the brain is receiving either from outside or from within the body.

'If one wants to perform a movement like "Stand up" or "Run

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for a bus" for a purpose, the appropriate muscular tension is built up by nerves leading from the brain. The work is done and immediately the tension disappears. If, however, the incoming information to the brain is an emotional one of fear, pain, or apprehension as one often finds in the pregnant and labouring woman, the brain becomes part of this fear reflex. It sends out messages to muscles to prepare for fighting or running away.

This stress reflex is very primitive, but the muscular tension being produced is obviously useless to deal with the situation. The tension builds up, and the patient can become exhausted.

All bodily activities are performed in patterns of movement, either innate or learned. The pattern of muscular activity in stress can be clearly demonstrated. It is exact and affects the whole body. All muscles do not need to be relaxed, therefore, only those involved in making the stress pattern. Let us consider the arms. The shoulder girdles are raised, the upper arms are flexed and held close to the body, the elbows are flexed and the hands clenched—making a picture of the typical fighting position.

To obtain relaxation from this pattern it is useless to say "relax" so one teaches the patient to apply for herself the law of reciprocal inhibition. Modern physiologists tell us this is "pre-programmed" in the nervous system. This means that if one group of muscles is contracted voluntarily, then the muscles which perform the opposite movement (the antagonists) must *relax*.

Therefore, to change the stress position into one of ease, the patient is asked to lie on the floor, and is taught to give the following orders to her arms: "Pull the shoulders towards the feet." "Stop." "Feel the resulting position." "Open the elbows out and away from the sides." "Stop." "Feel the resulting position." "Make the fingers long and supported." "Stop." "Feel the resulting position."

These orders have been carefully chosen so that the brain will work the muscles which will relax their tense opponents. One asks the patient to register the resulting position in *joints* because joints have so many nerve pathways leading to the brain registering position. Muscles have no pathways registering contraction.

Appropriate orders are continued until the whole body pattern is changed. Messages flash up and down, removing tension and registering ease. Gradually a feeling of well-being spreads over the body so that parts of it may even discard their own tension (for example, eyes may close) before they are told to do so. In any case,

if the whole technique is performed, total relaxation is the inevitable result.' (See Mitchell, 1963).

We are not in complete agreement with the Mitchell theory, particularly with regard to habitual stress patterns in labour and a somewhat different technique is described in later chapters. This interesting description does, however, prove that a real knowledge of the working of the neuromuscular system is required before one can teach somebody to relax; it is not sufficient simply to stand over a class and tell them to 'go limp'.

### Organisation of Material

As for a talk or discussion, the background material must be prepared; that is, the object and method of performance of each exercise or variation must be known. The former can be learned from lectures or a book, but there is only one way of learning the latter—to *do* it oneself and experience the required sensations. At first you need a sympathetic tutor to check your faults and then you practise at home in front of a mirror. Next comes the problem of how to teach the exercise to somebody else, and here the help of colleagues or family as a practice class is indispensable. They will be quite happy to show you that your instructions are not clear, or point out that they have been left holding their breath because you have forgotten to tell them to breathe out.

### Presentation

Having explained the object of an exercise the easiest method to illustrate what you are talking about is to demonstrate it. The cunning ones manage to talk and demonstrate at the same time. If you are facing a class remember that they see a mirror image of the movement so that if you want them to raise their *right* arms you must say 'right arms, lift' while you raise your own *left* arm. Then the class is arranged in a starting position such that you can see everybody easily, perhaps all facing the same way or all facing in towards the centre of a circle, but if the women have a tendency to giggle they may be better facing *out* from the centre.

Give a clear word of command after a pause, for example, 'Breathe in, breathe out and let—go', or 'palms of the hands together, elbows out, ready,—press'. One is not trying to be a drill sergeant but we have found that pregnant women, like others, appreciate a little organisation and like to know exactly what they

are supposed to be doing. More important still, it is much easier to run ones eyes over the group to spot faults and correct them if they are all moving in the same direction at the same time. Breathing is the exception to the rule, and since everybody has her own respiratory rate, this is left to each individual. Inexperienced people have a tendency to hurry exercises, particularly of the pelvic floor; the solution to this is to do the exercise oneself and perhaps count for the class at the same time.

### **The Voice**

All the points relating to appearance, communication and voice production in the section on Talks are relevant here also. The voice is a particularly powerful instrument when teaching exercises since the class will respond to your tone. If you say 'relax' you must sound restful, and not irritable when somebody is not doing too well. In contrast, if you want more effort out of the class, put more effort into your voice; for example, in an antenatal class you might say 'pull your tummies in, let go', while in a postnatal class it would be 'pull in, hold it, **HOLD IT** and let go'.

### **Corrections**

Move around and make contact with each member of the group. During the first one or two classes, corrections are best given in general terms; for example, 'Some of you are standing with your weight too far back on your heels', you demonstrate, exaggerating the fault, 'try to stand tall so that your bust line is in front of your tummies'. When you know the class better you will sense who can tolerate a little individual help and criticism, but beware of singling out one member of the group who is already different in her own eyes, maybe unmarried or coloured.

### **Working in Pairs**

We find that just as members of a group learn through talking to each other they also learn by watching and touching each other, and are often less shy of experimenting with movements with a partner than in a row in front of a teacher. This form of practice seems to be particularly useful in relaxation training. One woman can tense and relax her arms while the other feels and tests the difference. The sensory nerves can be further stimulated if one person taps or claps an area of skin, say over the long muscles of

the back, then keeping her hand still asks her partner to relax towards the feeling of warmth and touch. Working with a different partner each week helps to integrate the class and they support and encourage each other. Similarly, husbands can become interested and involved by learning these manoeuvres, and they can use them to offer active support during pregnancy and prepare for their possible role in labour.

### REINFORCEMENT

It is a good idea to spend a few minutes each week recapitulating the salient points from the previous class. One can preface one's remarks with 'Last week we talked about . . . , did it raise any questions after you got home, or does anything further arise that you would like to discuss?' Exercises always need a lot of repetition and can be made more interesting and useful if the basic movements are repeated in different starting positions.

A small number of the more intellectual members may take notes, but others will prefer to be offered duplicated notes or leaflets to which they can add their own reminders. A book list, or better still copies of suitable books, should be available for inspection but it is usually impossible to keep a class library owing to heavy losses. Notes and leaflets written by other teachers are never quite what one needs, and the experienced teacher will write her own.

Another potent source of reinforcement is from other people, maybe from an ex-class member, a distinguished visitor or a colleague who makes the same statements in slightly different words. 'Observers' can often contribute useful points from their own experiences.

### Evaluation of Learning

Evaluation of factual learning in groups of this kind is difficult since one is trying to get away from the teacher-pupil-school atmosphere and its standards. Occasional questions such as 'Does anyone remember what signs to look out for when you are approaching the end of the first stage of labour?' or, 'Does anybody recall the points to remember when you are giving your baby his first feed?' wake the class up and encourage them to think. But persistent questioning may make the duller members of the group feel inferior.

The best idea of what has really been assimilated probably comes from questions and discussions, or interchanges between two women who are practising together in a situation in which they think they are out of earshot of the teacher.

The performance of exercises and relaxation, on the other hand, is easy to evaluate, as is the improvement among those who practise. During later labour rehearsals it is a good idea to present the class with a situation and to ask them to show how they would cope with it. For example, 'You are walking back from the toilet and have a contraction in the corridor, what will you do?' or 'You are alone and you suddenly want to push, how will you cope?'.

### **Role-Playing**

This is a fairly modern method of teaching, but as it is used quite frequently in schools and colleges will be familiar to many class members. We all, to some extent, adopt role-playing in our teaching techniques. Here are a few instances.

In our second stage practising, to make it as real as possible, we try to mimic the midwife's encouragement as she urges the woman to push harder and longer, so that we ourselves assume the role of midwife in the rehearsal, and talk of seeing the baby's head—'It's got dark hair', etc. We may attempt an imitation of the baby's first cry, as the birth contraction is completed. We may also give some idea of the sound the suction machine will make in the seconds after the baby is born.

It is also a form of role-playing when we demonstrate on women how their husbands can help them with massage and support in labour. It is even more so when we encourage them to work in pairs, with one acting the woman in labour, and the other her husband. Working with parents together, on 'Fathers' evenings', the wife assumes the role of herself in labour, and the husband rehearses his support techniques with her.

One of us has recently given a morning's class on antenatal teaching to male health visitors, and as part of the purpose was to teach them how to describe the husbands' role, and how he could help in labour, when working with expectant parents, a male volunteer became the woman in labour, while the teacher became the husband giving support and massage. Space was limited, so there was no question of the whole class lying down, but by

rehearsing different adaptations of breathing and relaxing while sitting on chairs, and second-stage breath-holding with chin on chest, they all said they had a great deal more insight into what labour was really like.

Most of these illustrations would be used by a teacher without consideration that she was using role-playing techniques.

Deliberate role-playing is the setting up of small dramatic scenes to illustrate certain points for discussion. It could be physical, the teacher demonstrating the position of having, for instance, her legs placed in stirrups for a surgical induction, and encouraging the class to verbalise their feelings about the position. It could be a verbal interaction between two teachers to convey feelings; for example, a short dialogue in which one acted a tired wife at the end of a day with a crying infant, the other the husband, also tired, and the pattern of altercation which might ensue.

In *Teaching and Training* by H. R. Mills (1972), he notes that some advantages of role-playing are that interest is easily aroused and held, and that the teaching is both visual and aural and can sweeten a tired or 'browned off' class. He says that there are disadvantages in the time and effort required for production, and the dramatic or humorous effects may be exaggerated, unless great care is taken. Following this, in the next paragraph, he notes that role-playing is more suited to teaching *attitudes* than skills or knowledge. As our antenatal teaching is very much concerned with attitudes, perhaps role-playing has a part. If it is being done in the 'dramatic playlet' sense, the teachers using it must know each other and their own attitudes to various situations very well. They must decide whether to learn a set script, or to have a few guidelines on the topic to make a spontaneous performance. Above all, it must be well rehearsed, and then given first in front of critical colleagues, who will be honest in their assessment of acting ability and whether the reality of the situation has been conveyed. Without this, one could think oneself effective when in fact either overacting or appearing wooden and unrelaxed.

At the Third International Congress of Psychosomatic Medicine in Obstetrics and Gynaecology, in 1971, the first conference morning contained a beautiful piece of role-playing. An accomplished actress, speaking from a learned script, pretended to be a young woman waiting to see her doctor and learn whether or not she was pregnant. Her moving soliloquy contained the doubts,

fears and hopes of most women in this situation, and gave many male obstetricians present more empathy and understanding.

We can see that a playlet of a health visitor talking with a new mother could be of value, if the 'health visitor' came over as warm and helpful, while the 'mother' was very inquisitive, and perhaps a little stupid, so that answers could be simple, all the class could follow, and many questions they may have thought of could be answered.

Other useful playlets could be:

1. The first visit to an antenatal clinic (this to be in a very early class before the women have had hospital experience).
2. A dialogue between a midwife and a mother coming to hospital in labour, the midwife reassuring but rather 'official', the mother rather hesitant, not remembering events of early labour too well.
3. A dialogue between a mother with 'postnatal blues' and another who has come through them and gives encouragement.
4. A dialogue between a breast-feeding and bottle-feeding mother in hospital.
5. A conversation between a 'husband' who has supported his wife in labour and watched his baby's birth, and another 'husband' who is ambivalent, and feels he might not be of use.

We therefore think that role-playing, if used with confidence and care, has value, and should at least be considered as a teaching technique.

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#### FOR FURTHER READING

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## CHAPTER 3

# Audiovisual Aids

In this television-ridden age we are accustomed to having every fact illustrated, every emotion pictured, so the parents who come to our classes expect visual material of a high standard. The intellectual ones are used to learning from books and lectures, others may never listen to talks or read anything but picture papers and comic strips. In either case, far more people have visual rather than auditory memories—as Confucius said, one picture is worth a thousand words.

Pictures and diagrams help to clarify physiological processes, to emphasise points of importance, and to show situations outside the confines of the classroom. The hygiene of pregnancy is much more vivid against a background of shopping, cooking and gardening; the care of a new baby comes to life when a real baby is introduced to the class, or failing that an attractive film sequence. With the exception of the sounds accompanying a delivery, particularly the baby's first cry, pictures have a much higher emotive effect than sounds, hence their dangers but also their value in aiding memory and triggering off discussion.

### Sources of Material

Cost, availability and ease of transport are all important factors in determining what can be used. County health education officers and medical school librarians often have stores of material and equipment unthought-of by those who work on the periphery. Many drug and baby-food manufacturers will lend their films free of charge, and some will even supply a projectionist. Most slide and filmstrip producers will send their wares on approval. Technical colleges, schools and camera clubs are sources of projectors and record players of various kinds. Many shops will loan baby equipment for demonstration purposes.

The National Childbirth Trust publishes a *Teaching Aids Catalogue* which was being revised at the time we went to press. Some additional aids have therefore been inserted at the end of this chapter, together with a list of useful addresses.

### **Choosing Audiovisual Aids**

As with all other facets of this work, we are faced with groups of people who may have widely different cultural backgrounds and therefore may be affected in very different ways by the material presented to them. One girl may find a picture of an embryo a fascinating bit of scientific information, another will dislike it intensely because it conflicts with her own image of her growing baby.

One golden rule seems to be that any picture or model of a baby must be attractive. Dolls, if used, must be as life-like as possible and must always be handled with the loving care one would give to a real baby. Secondly, the parents should be able to identify with those in the pictures. This means that visual material requires frequent renewal as clothes and hair styles change. A few notable attempts, such as in the filmstrip 'Your First Baby' and the film 'Preparing for Sarah' have been made to picture mothers and babies of different races, but we are woefully short of material for Afro-Asians. Colour is highly evocative, some people find green placentas (as shown in one teaching aid) unattractive, and blood always looks peculiarly 'bloody' on colour slides. Humorous drawings can make a point, but a woman with, for example, poor posture, needs to be so grossly caricatured that no member of the audience would accept that it could be her.

Commercially produced teaching aids are expensive and are never exactly what one wants, so many of us are driven to produce our own. Simple movements of the hands can be used to illustrate dilatation of the cervix (Fig. 1), and spontaneous and instrumental delivery (Fig. 2). Diagrams that grow either by altering lines on a blackboard or gradually building up a flannelgraph picture are easier to understand than a completed drawing. Mothers often find it easier to remember a diagram that they have themselves completed; for example, they can be given a series of outline contraction waves and asked to fill in the kinds of breathing they have learned. Actual articles such as layette garments, bottles, teats and sterilisers are much more interesting than pictures and can be handled as well as looked at. Nothing can ever replace the presence of a real baby.

### **Points to Remember when using Audiovisual Aids**

Make sure that the aids are indeed large and clear enough to be

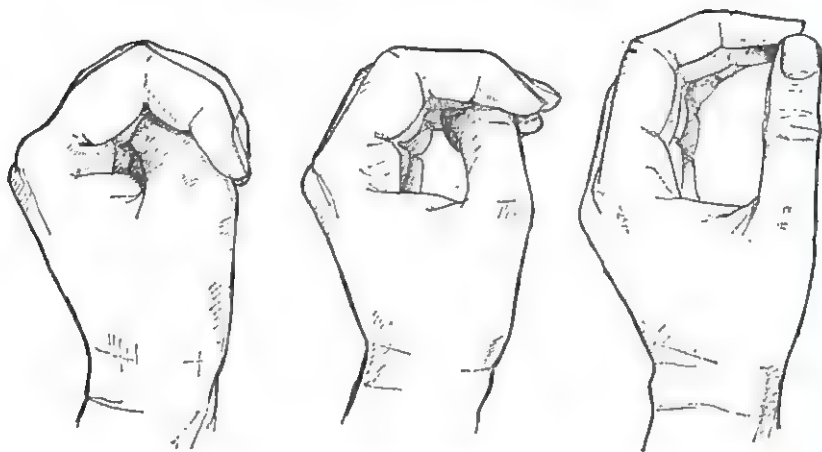


FIG. 1. Use of hand to show progressive dilatation of the cervix.

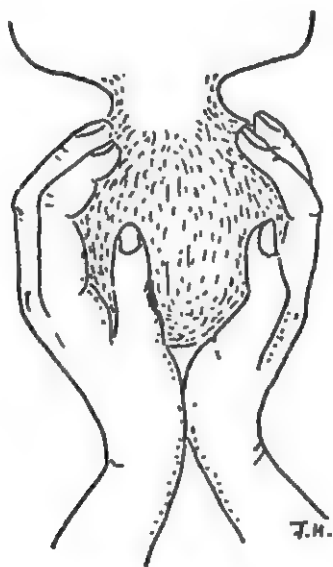


FIG. 2. Simulation of forceps delivery using hands and doll.

visible to the whole group and not marred by a shaft of sunlight, inadequate blackout, or your position between the class and the picture. Talk to your audience and not to your blackboard or screen. See that your record or tape recording is audible and not spoiled by background noise. Make yourself completely familiar with any material that you are going to use, so that you can handle it smoothly and interestingly, prepare your commentary to make the most of its salient points and think out suitable leads towards discussion. *Never* show films or slides, or play records, that you do not know, however well recommended.

Prepare all material in advance; floppy posters, missing dusters and upside-down slides will do nothing for your image or anybody else's. But do keep models or posters out of sight of your audience until you are ready to talk about them, otherwise all eyes will be staring at the model uterus rather than at you. Finally, watch the expressions and gestures of your audience and if you note a look of puzzlement or even revulsion be quick to explore the reason. The lack of audience contact is one of the great disadvantages of sound film.

Remember that you are your own most potent visual aid, the class will copy your posture and movements, and will be distracted if you wear flashy jewellery or fiddle with spectacles or hair.

### USEFUL AIDS

*Chalk boards and other boards.* Most antenatal clinics and centres have a blackboard and coloured chalks available; if not, a smooth piece of wood with a double coating of blackboard paint makes an acceptable substitute. Failing this, a piece of hardboard with white Fablon from Woolworths makes a good surface for drawing with water-soluble pentels. The drawings can be removed with a damp cloth.

*Overhead projectors* can be used as a more sophisticated form of blackboard. Words and drawings are outlined on a roller with water-soluble colours and projected on to a wall screen; blackout is not necessary. Writing in the normal size and hand position is easier for the teacher and Pentels are much less messy than chalk. Drawings can also be prepared in advance.

*Episcopes* are similar to overhead projectors but cheaper; they cannot be used for free-hand drawing but will reproduce previously

prepared material, leaflets, cut-outs or pages from a book. The teacher must be careful to arrange the sequence of pictures well ahead, especially if she is going to use several from one book.

*Flannelgraphs* have the advantage that the teacher does not need to pay attention to drawing, thereby turning her back on the audience, but can face the group all the time. A simple, colourful flannelgraph of human reproduction is available from the International Planned Parenthood Federation. Personal flannelgraphs, illustrating, for instance, the food which makes up a good diet, are easily made by cutting out suitable pictures, backing them with flannel or felt and pressing them on to a felt covered board. Alternatively 'plasti-graphs' of transparent coloured plastic cut-outs will adhere to a plastic-covered board.

*Charts, posters and pictures*, unless already mounted as in the Cow and Gate Mothercraft Aid, or in book form like the Maternity Center Birth Atlas, are better mounted on hardboard and rested on an easel or table. If they must be transported they may need to be rolled, but can be protected by a plastic film such as Takibak.

*Slides, filmstrip and film* all require more sophisticated apparatus but they do have an element of drama absent from other pictorial forms. Unless daylight screens are used, a good blackout is essential. Slides are the most adaptable since their order and the commentary that goes with them is infinitely variable. A sensible assistant to act as projectionist is helpful and should be provided with the slides, either marked with a spot in the bottom right-hand corner or better still with reversed slides arranged in order in a rack. If available, an automatic projector which can be loaded in advance (the Carousel takes 80 slides) and focused at a distance, thus allowing the teacher to watch her audience, is very useful.

*Filmstrips* are more easily transportable than slides and they cannot get out of order but only the commentary can be varied. Flipping over a frame is not a good idea since the audience is always suspicious that it is something nasty. To show filmstrips it is necessary to obtain a non-automatic slide projector with a filmstrip adapter. The strip needs to be inserted upside down and backwards. All film strips have an accompanying booklet, and some have taped commentaries which can be purchased separately.

*Film*. Thanks to television, film strikes a chord in most of our audience's hearts; this is something familiar. On the other hand, birth films in colour are still comparatively rare and they may have

terrific impact. It is one thing to watch a baby born, even by caesarian section, as a detached observer, but it is a very different matter if that is going to happen to you or to your wife in a few weeks' time. It may be a good thing to draw apart the veils of ignorance but it needs to be done with infinite care and delicacy and one would not always choose the film commentator's words. It is well to remember that parents give their whole attention to the expression and actions of the filmed parents—they are hardly conscious of the delivery techniques, which may be the first consideration of the professionals. We would like to see more films of young babies and their responses to food, comfort, light, and noise, made available to parents who may never have seen, let alone handled, a newborn baby. Films are expensive and relatively fragile; they should always be both shown and rewound by a skilled projectionist.

*Film loops* are a very easy way of showing short film sequences to small audiences. They need no threading up or rewinding since they are permanently mounted inside a cassette, but they do need special projectors some of which have a small translucent screen like a television set. They are also available with some of the 'Camera Talks' film strips to illustrate special sequences involving movement.

*Records* are now available for antenatal instruction. Some attempt, with the help of diagrams, to replace instruction from a teacher for those who are unable to attend classes. Others use a teacher's voice to encourage practice of relaxation and breathing techniques. These may be useful if the previous instruction has been along the same lines, but otherwise would be muddling. Records or tape recordings of an actual birth, which can convey in sound the atmosphere of a controlled and happy delivery and the excitement of the baby's first cry, make fascinating listening. They can be used to reassure parents who picture labour as 'one long scream' and to help them to think themselves into the roles of the recorded parents and discuss how they would react in similar circumstances.

*Models* are helpful when something such as a pelvis has to be looked at in two dimensions, but they are expensive. A bony or plastic pelvis needs to be presented to the group in differing positions so that they can appreciate its make-up. It can then be held against the demonstrator's body and the watchers can feel the bony points on their own bodies. It is now possible to buy an

accurate but very expensive model of the pelvic floor muscles; a good substitute, however, can be made of the fabric of an old girdle pierced by the three openings and marked by the guarding sphincters. This can be attached to the model and removed without a mark with 'Blu-tack', a plasticine-like adhesive obtainable from W. H. Smith and Sons. A useful 'mock-up' of a pelvis can be made either from a plastic bowl with a hole cut in it or from two layers of stiff brown paper moulded on to and cut out from a model pelvis. These can look surprisingly realistic and the latter will pack flat if it needs to be transported.

A modification of the pelvis and floor model was first suggested by Sheila Kitzinger and is widely used by members of the National Childbirth Trust. She originally used a shoe box as the 'pelvis', cut an oval hole in the bottom of the box, and covered both the inside and outside with a thin layer of plastic foam from Woolworths. The 'baby' can be delivered through a slit in the foam. A more realistic model which is well worth the extra trouble required to make it can be produced as follows. Buy a plastic mixing bowl about eight inches in diameter and cut a circular hole in its base about two inches in diameter larger than the largest measurement of your doll's head. This is a tedious operation but can be done with a fretsaw or a hot knife. Stick a ring of thin plastic foam over the inside of the bowl so that it overlaps the rim of the opening by about half an inch. On the outside of the bowl stick a circle of plastic foam with a slit long enough to allow the doll's head to pass through. Araldite will stick the foam to the plastic, and the two foam layers together, without difficulty. The double layer hides the edge of the opening and the single layer in the centre bulges most effectively like a perineum. With a little experimentation to get the measurements right, it will open realistically to allow the doll to be delivered through it (Fig. 3).

*Knitted uterus.* A cheap and effective model uterus can be made from a pear-shaped knitted bag. The pattern was designed by a member of the staff of the New York Maternity Center and is now obtainable in this country through the Obstetric Association of Chartered Physiotherapists (for the address see the end of the chapter). We find that the model is more realistic if filled with a balloon rather than being stuffed with old stockings as in the pattern, and that a double row of shirring elastic easily controls the opening of the 'external os' so that the ball or doll's head cannot

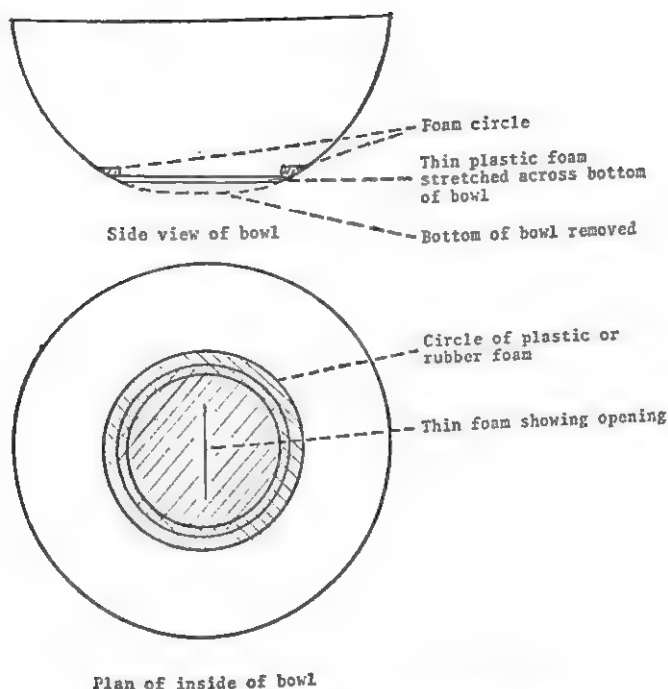


FIG. 3. Improvised pelvis using a plastic bowl.

fall out. It is useful for showing the effacement and dilatation of the cervix achieved by 'contractions', by squeezing the balloon. A simpler but less effective model can be made with the top of a sock, or the polo neck of a child's jersey.

*Models of fetal development.* These beautiful plastic models show the fetus in utero at different stages of pregnancy, and at full term. The pregnancy models (eight in all) show pregnancy from one month to eight months, with the baby in different positions—vertex, transverse, breech—and a twin pregnancy. In the later-stage models, the fetus is removable. The full-term fetus is also removable.

### Check List

Make sure that you have the following:  
 A quiet room arranged so that all can see and hear, well aired before blackout is done.

**Blackboard**

—coloured chalks

—duster

**Models and charts**

—table or easel to put them on

—spare balloon for knitted uterus.

**Slides, film, etc.**

—you or your assistant must know how the projector works

—plug is correct for the socket, with plenty of flex for easy positioning

—spare bulb for lamp

—film or filmstrips are correctly wound ready for showing

—slides are marked with spot in bottom right-hand corner and in rack ready for loading

—position of light switches is known

—spotlight or torch to read notes if needed.

**Record players**

—mode of action is known, particularly switches on tape recorder.

Birth atlas or other charts available to enlarge on any points raised in discussion.

**Address List for Aids***Plastic pelvis*

About £8.00

Educational & Scientific  
Plastics,  
Holmsthorpe Avenue,  
Redhill, Surrey.  
Redhill 62787

Pelvic floor for the above  
£21.00

Ditto

*Dolls, flexible*

Fetal dolls from £7.50 to £15.00

Ditto

Fetus with placenta and cord  
£12.00

Adam Rouilly & Co. Ltd,  
10 Winchester Road,  
London N.W. 3.  
01-636 2703

Very flexible attractive doll  
which will go through the pelvis  
but looks rather adult  
£2.00 while stocks last

National Childbirth Trust,  
9 Queensborough Terrace,  
London W.2.  
01-229 9319

Zambelli baby dolls  
£4.00 to £5.50

Selfridges,  
Oxford Street,  
London W.1.  
01-629 1234

Rag doll patterns and white and  
black doll faces

The Needlewoman,  
146 Regent Street,  
London W.1.

*Dolls for baby care*  
Anne Baby

Vickers Ltd,  
Basingstoke,  
Hampshire.  
0256 5151

Baby Tender Love  
£5.00

Selfridges,  
Oxford Street,  
London W.1.  
01-629 1234

*Models*  
Shoe-box model pelvis

Teaching Aid Catalogue of  
National Childbirth Trust,  
9 Queensborough Terrace,  
London W.2.  
01-229 9319

Knitted uterus pattern

Obstetric Association of  
Chartered Physiotherapists,  
St Barbara Cottage,  
Church Lane,  
Great Walsingham, Norfolk.

Fetal development  
Pregnancy set £76 + VAT  
Full-term model £60.50 + VAT  
Complete set £135.50 + VAT

Adam, Rouilly & Co. Ltd,  
10 Winchester Road,  
London N.W.3.

*Charts*

Birth Atlas (Dickinson Belskie)  
published by Maternity Center,  
New York

£7.75

A Baby is Born—small birth  
atlas in book form which  
includes breech birth

£1.76

Relation of Growing Fetus to  
Other Organs. 4 black and  
white charts 17 × 28 in., show-  
ing how mother's body adapts  
to growing baby

£2.00

Mothercraft Visual Teaching  
Aid

£3.00

H. K. Lewis & Co. Ltd,  
136 Gower Street,  
London W.C.1

01-387 4282

Ditto

Schuchardt Charts by  
Maternity Center,  
National Childbirth Trust,  
9 Queensborough Terrace,  
London W.2.

01-229 9319

Cow & Gate Motherhood  
Bureau,  
Cow & Gate House,  
Guildford,  
Surrey.

*Pictures*

Pictures of mothers and babies  
of different races can be chosen  
from 'Mother and Baby' files of  
picture library and copied

International Planned Parent-  
hood Federation,  
18-20 Lower Regent Street,  
London W.1.

*Flannelgraph*

Flannelgraph of human repro-  
duction including birth

£1.50

Ditto

*Records*

Fearless Childbirth. 2 long-  
playing records, a booklet and  
charts describing the Betty  
Parsons method of preparing  
mothers for labour

£3.25

Saga Records,  
326 Kensal Road,  
London W.10.  
01-969 6651

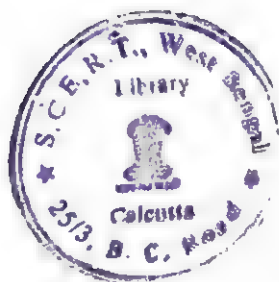
## AUDIOVISUAL AIDS

Physiological Relaxation by  
Voluntary Control—the  
Mitchell method of teaching  
relaxation

£0.75

Other tapes in process of  
production.

Miss L. Mitchell, MCSP,  
Dipl TP,  
8 Gainsborough Gardens,  
London N.W.3.  
01-435 9337



## CHAPTER 4

# Equipment and Planning of Classes

Most teachers have to make the best of the space allotted to them for classes, and in many cases it is far from satisfactory, but a number of new clinics and maternity units are now being built, so it may be useful to consider an ideal set-up. The location chosen should be within easy reach of public transport and have some car parking facilities of its own. There is, of course, no reason why the unit need be used exclusively for parentcraft classes but at the time that these are being held the group should have available to it a class room, cloakrooms, a pantry for making tea or coffee, a small private office and, if two classes are to follow each other without a break, a waiting room. If fathers' or film evenings combining several classes are envisaged, then a room large enough to hold the expected number of couples will be needed.

### ACCOMMODATION

*The classroom* should be large enough to accommodate the mothers comfortably when they are lying down, with space for the teacher to move around, but not so large that a cold impersonal atmosphere is created. The minimum free floor area for each woman is about 6 ft by 3 ft 6 in. A rectangular-shaped room is the most convenient when teaching exercises, with a minimum width of about 14 ft. The mothers can then lie in two lines with their head pillows against the walls, leaving the teacher enough space to walk up and down the middle. The women may like to remain sitting on their mattresses with their backs supported by pillows against the wall for talks and discussions or to sit in a half circle of chairs.

The room needs to be warm and well ventilated but free from floor draughts. Old fashioned sausage-shaped bags filled with sand are very useful for mitigating draughts under doors. Diffuse lighting is much more restful to the eyes than direct overhead lighting when one is lying on one's back but it must be strong enough to make pictures or diagrams clearly visible. A very sunny room may need curtains or blinds so that a shaft of light does not dazzle any member

of the group. Blankets may be used as practice mats but rubber or plastic foam mattresses are much more comfortable, and these should have removable covers of some gaily coloured washable fabric. Loops at each end of the covers greatly facilitate handling. Plastic foam wedges sloping from a height of 8 in. to 2 in. on a 48 in. sq. base make excellent head and shoulder supports. Cylindrical bolsters are comfortable rests for flexed knees when the mothers lie on their backs. These bolsters may be filled with foam chips or be made of inflatable plastic bags similar to the buoyancy bags in a sailing dinghy. The latter are easy to store flat but if they have to be inflated frequently, a small hand or foot pump is a great advantage. If wedges and bolsters are not available, each mother will need at least three pillows, two for the head, one of which can be quite small (about 18 in. by 12 in.) and one for the knees. Plastic pillow cases used in some clinics are hygienic but slippery and cold to the touch. Nylon seersucker or brushed nylon pillow cases are hard wearing and easy to launder. A few extra pillows will be needed to make somebody who has backache comfortable. Storage of mattresses and pillows can be quite a problem in a busy hall or clinic; the former should be kept flat, piled on a low broad shelf or hung from pegs against a wall. Further information about this equipment will be found at the end of the chapter.

If slides or films are to be used in this room, sockets for projectors and an adequate blackout are required. Most important of all, the room should be light and clean and have a welcoming air. Much can be done to improve an old one with bright posters or pictures of babies of different nationalities round the walls.

*An office* or small additional room is of tremendous value if the teacher wishes to have a private talk with a mother or couple and can be used as a rest room if somebody is feeling unwell. At least three comfortable chairs are needed and a desk for note-taking and records.

*Cloakrooms.* Adequate lavatory and washing space is a necessity wherever pregnant women are gathered together. Paper towels, with plenty of space for their disposal, and paper cups for drinking water are needed. Another lavatory at not too great a distance, which can be used by fathers, is greatly appreciated.

*Equipment.* Light but comfortable stacking chairs are needed for the classroom and at least one comfortable armchair is useful for demonstrating relaxation in sitting. One or two tables are invaluable.

able for the display of leaflets and the accommodation of records and teaching aids. A blackboard fixed to the wall with a good supply of coloured chalks and an eraser is important, in addition to the other teaching aids which the teacher will buy or make. Cupboards with safe locks are needed for the storage of all equipment.

## PLANNING THE COURSE

### **Getting a Class Together**

Except during population fluctuations, good, established classes are rarely short of applicants, their worth is handed on from mother to mother but new courses may need hard background work and take time to build up. This is especially true if we are trying to interest foreigners to whom the idea of preparation for childbirth may be new, or people who have recently moved into the area. The task is extra difficult if we are also trying to prove the worth of such classes to sceptical maternity staff in the district. Consultant obstetricians, members of labour ward teams, GPs at booking clinics and sisters in antenatal departments can be approached in a number of ways, but preferably by the teacher in person. She will need to make her own opportunities for a preliminary approach to any of these people, possibly even seek their opinion of this book, but if she goes to a definite interview she must be well prepared to state her own aims clearly and offer a sample course programme for discussion. Physiotherapists are bound by their ethical bye-laws to accept patients only from a doctor but it is a great help if the doctor in charge of the patient's antenatal care is enthusiastic about the classes rather than merely permissive.

The National Childbirth Trust keeps a list of its own teachers and will refer an enquirer to the nearest class in her area or to similar organisations abroad. Staff in the units from whence it is hoped to draw patients should have clear and up-to-date information about the locale, days, times, starting dates, and booking arrangements of the courses and may be persuaded to put up a notice about these. Unfortunately, many pregnant women, like railway travellers do not read notices, and a few minutes spent by a staff member explaining the classes and how they can help is worth half a dozen posters. Names and addresses and expected dates of delivery of interested mothers should be noted so that a personal invitation to

attend the first class of a certain course can be sent out. Alternatively, if mothers are coming from a single clinic they can be given a note confirming a date and time when they should come.

Six to 10 mothers seem to be the optimum number, as above 10 it is difficult to get to know the members of the group. Discussions are less interesting with less than six, although this will largely depend on the ability of the teacher and size of the room. Interpersonal relations become particularly important in these small groups.

### **Time and Duration of Classes**

When planning the day and time of the classes, various points should be considered. In rural areas, or others where mothers must make a long journey, it may be helpful to hold the class on the same day as the antenatal visit. On the other hand, this may mean a lot of hanging about for some members of the group, and, if others require any special examination, they may miss the class. Such things as infrequent buses and cheap day fares should certainly be taken into account.

Daytime classes are desirable for both staff and primigravidae towards the end of pregnancy, but the latter may appreciate one or two evening classes earlier on and a fathers' class later. If both parents are invited to all the classes these will necessarily be in the evening. Multigravidae with children under school age naturally find daytime classes difficult; a friendly neighbour or a clinic creche can solve the difficulty, but sometimes the only time these women will really either relax or concentrate is when the other children are at home 'with dad'.

We believe that the maximum duration of a class should be about two hours, and this should include refreshments, several changes of activity and possibly a change of teacher. After a two-hour session there should be at least half an hour's break before any one teacher is expected to begin another class, partly that she may recover her energy, and partly that several mothers may wait for the end of the class to ask privately about some point that has been worrying them. The tea break should be used as a time when the women can talk freely among themselves and make friends, but the teacher should be unobtrusively available and may indeed find herself making tea assisted by somebody who has a problem she wants to talk about.

Decisions as to what stage of pregnancy the women should start

and finish the course offer a number of problems. There is little point in discussing diet, posture and the layette in the third trimester; on the other hand, preparations for labour and baby care are forgotten if learned too early. One would like to keep in touch with as many of the group as possible up to the time of delivery, but unless the syllabus is completed three to four weeks before the expected dates of delivery some will miss vital information due to pre-eclampsia or early induction. We have found that the best solution to these difficulties is to arrange one or two classes at about 16 weeks of pregnancy, one at least of which might be in the evening for couples. The rest of the course, including another evening for fathers, is then given between 28 and 36 weeks, and there is at least one refresher or continuation class open to women who have a month to go before their dates.

If classes are held only once a week and the course lasts for eight to 10 weeks, difficulties may arise in fitting in new people. It may be possible to start a second class in the week, thus giving a monthly intake, but if staff or numbers make this impracticable we believe that it is better to shorten the course while keeping it progressive rather than to take new people in continually. An exception may be made for allowing a woman to join the second class of a series but after that the group should be closed, except for those who have already done one course for their first baby and return for a 'refresher' of three to four classes.

### **Content of the Course**

The syllabus of each course will evolve gradually through trying to match the needs of the parents in the area, as these are revealed, to the staff and facilities available. Some suggestions are appended. Pregnant women need to go to the toilet frequently and are rarely comfortable for long in one position, so that several breaks and changes of position are desirable during any two-hour session, no matter what its content. Talks, discussions and exercises have been mentioned as the three methods of instruction commonly used in antenatal classes. If one teacher is responsible for the whole of a class the order in which these are used does not seem to matter much and may well vary either in the way a class develops and spontaneous discussions arise or according to which class is being taken. She may begin by talking or showing a filmstrip, encourage

a discussion to develop, and finish with relevant exercises. Alternatively, she may begin by recapping the previous week's exercises while the latecomers get settled, then break off for a discussion, and pick up some particular point of interest that has arisen for a short talk. To finish she may go back to exercises again to highlight some point, for example the technique of pushing after a discussion on the second stage of labour. A refreshment break may thus be needed at different times. On the other hand, if two teachers are working consecutively with a group and their times and subjects must dovetail, much more definite structuring of each class is needed.

Classes where baby-care is completely divorced from the mother's care and reactions to childbirth do not on the whole seem desirable except perhaps for multigravidae, but if such a scheme exists there should be a frequent interchange of ideas between the teachers.

*The first class* is tremendously important and may well set the tone of the remainder of the course. Each mother, or if it is a combined evening class, each couple, should be welcomed by the teacher as guests rather than as patients, and information about them, if not already known, should be learned in a friendly and informal way. When the group has assembled, allowing a little time for latecomers in this first class, the teacher may introduce herself by name and tell the group why she is interested in antenatal education, perhaps including a remark about her own children if she has any. She may then ask the members of the group to introduce themselves, perhaps giving their full name, when and where they expect to have their babies, whether it is the first, and if not the ages of the others. If the group is a structured one, the teacher may then go on to tell the group its aims and briefly what is to be included in the course; alternatively, she may ask for their ideas on what aspects of childbirth they would like to have discussed. She will probably want to make the whole proceedings as informal as possible and to stress that questions will be welcome on any aspect, at any time, and it is hoped that the members of the group will share their experiences, ideas and reactions.

### **Records and Follow-Up**

Essential information about each mother, such as her name, marital status, address, date and place of delivery, parity, and ages of other children, must obviously be recorded. It is useful to be able to refer to the medical notes, or at least to the mothers' continuation

cards. Her occupation either before or during pregnancy is of interest, so is a brief history of other births and any salient points about her reactions to this one, for example, whether she feels fit and is happy about having the baby, how she plans to feed it, and whether she wishes her husband to be with her in labour. It may well be that these facts will emerge gradually during the course and there is a lot to be said for keeping a card for each mother in the class, instead of, or as well as, a simple register of attendance. The teacher can thus build up a picture of each mother or couple, including what questions they have raised, and their reactions to their problems, which will be of great interest to her and guide her in working with them.

Learning names is always a problem, but if a teacher is to gain real empathy with her group it is one which she must solve. Some teachers use first names, feeling that this is easier and adds to the informality of the class. We introduce ourselves by our christian and surnames and find that the class members quickly follow suit, they usually call each other by their first names, but we call them all by their surnames. An older teacher may well feel motherly towards a group of young women but we believe that, when young people are struggling to establish their identity in a new role, it is particularly important that helpers should recognise their new position by addressing them with appropriate dignity. All the women are called 'Mrs' unless they themselves make a point of their unmarried status. Some teachers like to ask their mothers to fill in name tags and to wear them, others resort to cryptic reminders on cards, such as 'tall dark secretary, usually wears red'. The leader who can quickly learn the names in her group by whatever means certainly has a tremendous advantage in showing her personal interest and care for each member.

The most exciting and educative follow-up to antenatal education is to be with a couple whom one has prepared in labour, at least occasionally, and to watch their first reactions to their baby. The work of any teacher who does not have this privilege tends to become uninspired and unrealistic. Next comes some form of personal contact after the baby is born, whether in the lying-in wards, in the home, or at a clinic where the mother's growing relationship with her baby, and any problems of adjustment that the couple may have, can be observed. Letters and telephone calls are second-best but still useful if the mothers are able to express

themselves. They greatly enjoy a class reunion to which they take their babies about six to eight weeks after the last in the group has been delivered. If statistical results are required, these can only come from a carefully planned series of observations or reports derived from pre-tested questionnaires.

## SUGGESTED OUTLINES FOR TWO COURSES

### Course 1

Local Authority or private class, for mothers going to different units. Starting at 26 to 28 weeks of pregnancy.

1. Introductions  
Scope and purpose of the classes  
Outline of reproductive system  
Physical and emotional changes of early pregnancy  
*Practical*: Correct posture and use of the body when standing, sitting, moving and carrying.
2. Further changes in pregnancy, including breast changes  
Discussion on feeding methods, breast preparation for those interested  
The importance of antenatal care, diet, sensible living habits  
Layette  
*Practical*: Recapitulation of posture, exercises for abdominal wall, pelvic floor and breasts; begin general relaxation.
3. Signs of labour  
Contractions, what they do and may feel like, how to cope  
*Practical*: Relaxation with deep breathing in sitting, leaning and different lying positions; begin shallow breathing.
4. Later 1st stage of labour and signs of its end  
Coping with contractions as labour advances  
Drugs, analgesia including epidurals if available  
*Practical*: Relaxation with pelvic rocking for backache; various forms of massage; relaxation with deep to shallow breathing; broken rhythm breathing, tapping or counting if pushing reflex is established before full dilatation.
5. 2nd and 3rd stages of labour  
Appearance and early reactions to baby  
*Practical*: How to push or pant as requested.
6. Different patterns of labour including inductions  
Early development of baby

Demonstration of holding baby in comfortable positions

Beginning breast feeding

*Practical:* Labour rehearsal.

## 7. The puerperium

Hospital or home routine

Demonstration of sterilising, making up feeds etc, for bottle feeding.

## 8. Father's evening

Film or slides and discussion on labour and puerperium

How men can become involved and helpful

Short talk or filmstrip on family planning.

## 9. Introduction of baby to class

Bathing it

*Practical:* Second labour rehearsal picturing some of the variations (e.g. an induction).

## 10. Taking the baby home, film, filmstrips and discussion to show its further development and routine

Introducing baby to the family, changes in parents' lives

Family planning (if not already done)

Postnatal check

*Practical:* Any points the class wishes to recheck, especially second stage of labour.

## Course 2

Shorter course for mothers all booked at one hospital. Bathing, bottle-feeding, postnatal exercises, and family planning are not included since all are dealt with during hospital stay.

Starting at 16 weeks of pregnancy with an evening class for both parents.

### 1. Welcome—aims of the course

Filmstrip such as 'Your First Baby', Part 1, or first half of film 'Preparing for Sarah'

Discussion of physical and emotional changes of early pregnancy

Diet and living habits to give baby a good start

Choosing major articles of equipment (which will interest men)

*Practical:* Demonstration of good posture and working habits; simple relaxation and exercises sitting on chairs.

### 2. Recommencing at approximately 30 to 32 weeks

Further changes of pregnancy including breast changes and preparation

Discussion on feeding

Signs of labour

Layette on view for questions

*Practical:* Recapitulation of exercises; general relaxation with deep breathing.

3. 1st stage of labour

A shortened version of classes 3 and 4 in previous syllabus.

4. 2nd and 3rd stages of labour

As for previous class 5.

Different patterns of labour

The newborn baby

*Practical:* Labour rehearsal.

6. Second class for fathers

Film or slides of labour and how fathers can help

The puerperium and hospital routine

Taking the baby home.

7. Hospital visit

Talks with lying-in mothers, observation of babies and their feeds

*Practical:* Second labour rehearsal.

## ADDRESS LIST FOR EQUIPMENT

### *Mattresses*

Foam Camping Mattress

6 ft × 2 ft 3 in.

£3.23

Blacks of Greenock Ltd,

3 Rathbone Place,

London W.1.

01-636 6645

For local stockists write to  
Black & Edgington,  
Ruxley Corner, Sidcup, Kent.

Renway Gymnastic Mat, polyether  
foam, PVC covered, various  
sizes

Renway Products (U.K.) Ltd,  
76 Woodvale Road,  
Belfast BT13 3BP.

Relaxation pads, 6 ft × 3 ft × 1 in.  
fitted washable loose cover

£5.51

Price Bros. Ltd,  
Wellington, Somerset.

*Wedges*

Chiltern Wedge, foam, 24 × 24 in. base, 8 in. at one end sloping to 2 in. at other.

£1.75 inc. p/p, £1.50 if collected.

Covers for same, royal blue brushed nylon

£1.00

Foam wedges, 24 × 24 in. base, 9 in. at one end and 3 in. at the other, with washable loose covers  
£3.36

Mrs. V. Culling,

3 Penn Close,

Chorley Wood, Herts.

for National Childbirth Trust.

Ditto

Price Bros. Ltd,

Wellington, Somerset.

*Cushion*

Posture Curve Cushion, about 18 in. square, especially shaped to fit into and support lumbar curve, very comfortable for those with backache

£3.50 with cover and carrying handle

(£3.00 from National Childbirth Trust)

Sleep Centre,

John Bell and Croydon,

50 Wigmore Street,

London W.1.

*Bolster*

Hexham Bolster inflatable air cushion for underknee support

£1.25

Mrs G. Charlton,

Linnel Wood,

Hexham, Northumberland,

for National Childbirth Trust.

## CHAPTER 5

# Discussion of Pregnancy

We cannot stress too often, or too forcibly, that a pregnant woman is vulnerable—that pregnancy, especially for the first time, is one of the major crises in a woman's life. In her first pregnancy she will change and grow emotionally, as well as physically. Some of the emotional growth will be through joy, anticipation and acceptance. There will be times when a woman will feel bubbly with happiness, perhaps as she feels the baby move, and times when she will go around dreamily in madonna-like serenity. She can imagine herself as the perfect mother, and discuss her pregnancy with delight. Thus she is accustoming herself to her new role. On the other hand, as teachers, we observe that pregnancy is at times difficult, and that some of the emotional growth may be achieved through apprehension and the overcoming of that fear.

All antenatal teachers, and in fact all who come in contact with pregnant women in a professional capacity, should remember that each woman will have times when she feels vulnerable, alone and afraid. She will also have feelings of ambivalence—even if the pregnancy has been eagerly desired and planned. Many women we meet, however, will have had to cope with an undesired pregnancy, perhaps a rushed marriage before which they will have experienced dismay, terror, a feeling of being trapped, parental disapproval and perhaps even a desire to abort. Some of the women will not be married, and may have little support from family and friends.

All, the fortunate and the much less fortunate, will have times when the realisation that their lives will never be the same again fills them with alarm. They may have to give up a challenging job and wonder whether caring for a baby will be a sufficiently satisfying occupation. There will also be the sudden, irrational fears—that they will fail as mothers, have an abnormal child, or even not survive pregnancy.

The pregnancy fills their thoughts, colours their whole attitude to daily life, and they become extraordinarily sensitive to words brooding on the most casual remarks of obstetricians and giving them distorted meanings in many cases. One example of this was

a woman from one of my classes whose obstetrician had said heartily and casually, 'That's a nice big baby you've got in there', and for weeks she worried about how it would get out, until her next hospital visit. This time she was examined by the registrar who, again casually, said, 'A nice compact baby here—not too big'. One would think she would be relieved, but in class she suddenly said she felt the baby must be abnormal, as it could not possibly be growing, recounting the two statements. Fortunately, the rest of the class had experienced similar light-hearted comments, and she was eventually reassured that both doctors were making casual conversation about a perfectly normal pregnancy.

We can, as teachers, be aware of these stresses, and the excessive egocentricity of the pregnant woman. We can aim at truthful reassurance (always choosing words with exquisite care so that they are descriptive but not alarming) and a loving, caring attitude. We can give positive encouragement that she does her best, throughout pregnancy, to ensure her child's safety and wellbeing. By doing this, she is adopting a mature attitude and already 'being a mother', preparing for her coming role, and accepting that she is already responsible for another human being.

### **What Does a Woman Want to Know about Pregnancy?**

We suggest that the following questions are uppermost in most women's minds.

1. What is happening to my body?
2. How can I protect my baby and keep it healthy?
3. How can I adjust to this experience?
4. How can I remain as attractive and comfortable as possible in pregnancy and return to my normal figure afterwards?

In addition we need to tell her of the 'danger signs' which should be reported to her obstetrician or midwife.

### **METHODS OF PRESENTING THIS INFORMATION**

We need to answer the factual questions, discuss the changes in attitudes, and teach the neuromuscular control which will help her to adjust her body to its changing weight and centre of gravity and to overcome stress by relaxation. Therefore, each class fits the preparation-for-childbirth triangle of a set talk with questions, a discussion period, and a period of practising neuromuscular control.

We must also keep in mind the teaching triangle of teacher-class-subject, making sure that the teacher can present her material well, that the subject is relevant and important to the class, and given in such a way as to be interesting and attention-holding to that particular group. Because we do not intend, in class, to keep to a rigid schedule, it is possible that any topic could be discussed in any part of the course, depending on the needs of the members.

A flexible plan for information about pregnancy could be as follows. The first two points, 'What is happening to my body?' and 'How can I keep my baby healthy?', together with signs which need to be reported to obstetrician or midwife, could be covered by a set talk with questions, leaving plenty of time for clarification of points not understood. The third topic, 'How can I adjust to this experience?', falls naturally into a group discussion pattern. When covering the fourth topic, 'To remain attractive and comfortable and return to a normal figure afterwards', we would concentrate mainly on neuromuscular control.

### **Physical Changes and Health Care (Topics 1 and 2)**

This would vary depending on the stage of pregnancy (see the syllabus examples) but could have the following headings.

*Anatomy and physiology.* This should be illustrated, wherever possible, by the Birth Atlas, Schuchardt charts, Cow and Gate pregnancy charts, blackboard diagrams, flannelgraphs, or filmstrips, and by the use of the teacher's own body and a model pelvis or even a large basin.

A brief and simple explanation of the size, position and shape of the reproductive organs, both non-pregnant and as pregnancy advances, with special reference to the protection the body gives and the adaptation of other organs throughout pregnancy.

The level of the fundus at different stages of gestation, and reasons for pressure symptoms, breathlessness, rib pains, bladder frequency.

Changes in hormone balance leading to the slowing of activity of unstriated muscles, perhaps causing constipation, haemorrhoids, varicose veins, indigestion. Ways in which these can be alleviated.

Breast changes. Muscle and joint changes, slackening of ligaments, with perhaps backache or pain in the symphysis pubis.

Changes in weight, balance, and centre of gravity.

The growth of the baby—size, weight, movements and heartbeats, and when able to survive independently.

The position of the pelvis and its relationship to the baby's head (together with terms used to denote the proximity of the head to the pelvis). The pelvic floor.

*Professional antenatal care.* This subject can be divided into the following topics:

The 'routine' questions and examinations, and their purposes.

What is learnt in an early and a late pregnancy vaginal examination.

Blood pressure and urine tests and their importance in the early warning of pre-eclampsia.

Blood tests, and what they discover.

The importance of checking the fetal heart rate, and the 'lie' and size of the baby. External version.

Ultrasonic echo sounding (ultrasound). Amniocentesis. Amnioscopy. Decompression.

Signs to report to the obstetrician or midwife, which ones are important and should be reported immediately, including any bleeding, losing liquor, headaches, disturbed vision, excess weight gain, oedema, regular strengthening contractions (with reassurance that early treatment will give the greatest possibility of continuing a normal pregnancy).

*The mother's own care of herself and the unborn baby.* This covers various aspects of health and hygiene:

Sensible eating, rest and exercise, with care that these are based on the educational, cultural, social and economic background of the group.

Shoes and clothes, including discussion of abdominal and breast support.

Breast preparation.

Dental care and prevention of calcium deficiency.

Smoking and its hazards to the fetus.

'New wives' tales', such as toxins, e.g. in potato blight, tannin, etc., which are constantly appearing in the news media.

Any other topics arising from questions.

### **How Can I Adjust to This Experience? (Topic 3)**

Changes in role and attitude can usually best be explored

through group discussion, though this method of teaching can also be used for other parts of the syllabus. It requires a delicate sensitivity on the part of the teacher, to know when to let the group get side-tracked because this is benefiting the majority, or maybe even helping just one or two, and when, with a question or comment, she should bring the group back to the topics she has planned. The teacher, as group leader, should have an idea of the topics she intends to suggest, and may begin with a short talk or a filmstrip or film (for example, 'Your First Baby, Part 1, Pregnancy' or the first part of 'Preparing for Sarah'—see Chapter 3). She can then ask a few questions to encourage the participants, being prepared always to efface herself according to the group's needs, and to allow freedom in discussion.

*Emotional changes.* Thoughts, worries, attitude swings, sensitivity, changes in the relationships with husband and parents—these are all topics which might be discussed. The teacher may commence: 'One mother said, . . . do any of you feel like this?' 'Do you find you burst into tears easily?' 'What do you feel about the baby's movements?' 'What do your husbands say when the baby kicks them?' A question such as 'How many of you know that your husband wants to be present at the birth?' can lead to a general discussion of husbands' attitudes, and an invitation to bring them along to an evening class. When the group know each other well and are becoming freely vocal (perhaps after the first few weeks of meeting) a very revealing discussion can start with the question 'How many of you feel scared? Can you say why?' With practice and sensitivity a teacher can 'feel' how far a group wants to go in the exploration of their feelings.

*Changes in life style and role.* Under this heading might fall the following subjects: stopping work, loneliness, managing on one salary and budgeting, and difficulties with accommodation. Some mothers may feel 'different' and apart from their non-pregnant friends, and find subjects trivial which had been interesting, because the fact of pregnancy becomes all-absorbing.

Sexual relationships cause concern, both partners still needing warmth, reassurance, companionship and love. The teacher can introduce the subject by saying that some women become a great deal more sexually responsive in pregnancy, while others cannot respond as before—as if they were 'guarding' their bodies. In the same way, some men enjoy the greater sexual freedom of abandoning

contraception, while others see their wives as the mother of their child, and are a little afraid of sexual activity. It is important to convey that neither attitude is 'wrong', but unresponsive wives could be encouraged by a reminder that sexual expression does not necessarily imply full intercourse, especially in very late pregnancy when it may be uncomfortable, but that loving caresses can be exchanged in many ways and different positions.

Sharing the pregnancy with one's partner as much as possible should be stressed, talking about clinic visits, classes, moods and feelings.

*Coping with difficulties.* Here, the group can be encouraged to discuss freely anything which has bothered them during pregnancy, and how they, as a group, have found different ways of handling these difficulties.

For instance:

Vomiting and tiredness in early pregnancy.

Increased irritability of the mucus linings of the body—vaginal irritations and discharge, excessive salivation, colds and coughs which 'hang on', catarrh

Cramp, indigestion, constipation, haemorrhoids, varicose veins

Stretch marks, backache

Difficulty in taking iron because of upsets of digestion

Being told old-wives' tales and horror stories

Sleeplessness

Pressure pains and nerve pains

Braxton-Hicks contractions strong enough to be painful

Waking in the night and feeling scared

'Going off sex'

Worries about the baby's normality—'We hear so much about things being wrong with babies these days. Are a lot of babies abnormal?'

Each discussion period will, of course, alter with the differentiation of age range, maturity, childbirth experiences, cultural level, and stage of pregnancy of the group. A widely differentiated group can be a very supportive one, although it is one which is more difficult for a teacher, as she is trying to 'give' different things to different members of it. Nevertheless, we have found that much of the 'giving' comes from individual members of the group, and that multigravidae often choose their words carefully, and give confidence to young primigravidae.

### **How Can I Remain Comfortable, Attractive, and Regain my Figure? (Topic 4)**

Some of these answers will be given in a talk or questions, or in group discussion, but in the third part of the class we aim at teaching body-awareness (see Teaching Techniques, Chapter 2)—that is, to instil in the group the enthusiasm for regular practising of exercises, and day-to-day consciousness of their bodies and how they are using them.

Exercises should be taught with enthusiasm and care, encouraging the class to think of how their bodies are responding, and to appreciate the differences between tension and relaxation of different muscle groups, so that they become more aware of the action and reaction of their bodies in daily life, and in stress situations.

In the exercise session we would teach:

General relaxation

Preservative exercises for the abdominal wall, pelvic floor and breasts

Correct posture, when standing, sitting and walking

How to minimise strain when getting out of bed, lifting and carrying objects

Positions for rest which will prevent circulatory stasis.

This training will benefit every woman during pregnancy and afterwards, irrespective of the type of labour that she may have.

### **USEFUL EXPLANATIONS**

Aiming always for simplicity and clarity, here are some suggestions of words to use when giving a set talk, answering direct questions in group discussion, and teaching neuromuscular control and awareness. It is neither possible nor necessary, in a book of this size, to describe all the talks and discussions in full. We have therefore chosen a few topics which, in our experience, many teachers find difficult to portray simply. It is not our intention that these words should be followed slavishly—they are given merely as examples for teachers to consider.

A new teacher should not be afraid of simplicity. In a mixed class many will have studied biology at school, but during pregnancy an easily understood and emotionally satisfying explanation is more appropriate for almost all intelligence levels.

## The Pelvis and Pelvic Floor

Visual aids: drawings or film slides, and model pelvis held against the teacher's body as she talks.

'As you can see, the pelvis is an irregular circle of bone at the bottom of the body, and this model looks like one solid bone. There are two main bones which meet at the front here and are joined together at the base of the spine by a third triangular-shaped bone, the sacrum. Below the sacrum are four small bones called the coccyx which in animals extend to form the tail.' (The class can then feel the dimples on either side of the base of the spine which indicate the sacro-iliac joints, the hip promontories, and the symphysis pubis.) 'These four bones have joints here which relax a little in pregnancy. The baby's head' (demonstrated with a model) 'has to go through this circle, and in a first pregnancy it usually lies right inside it before labour begins. When that happens your doctor says the head is "engaged". After the first pregnancy the abdominal muscles can stretch more and the baby has more room to move so doesn't need to have its head "engaged" until labour begins.

'Pelvis is a Latin word meaning basin—but you can see this basin hasn't got a bottom. The bottom of the basin is a sling of muscles called the pelvic floor—layers of muscles covering this area here. From the front to the back, underneath your body, it has three openings, the front one leads to the bladder, the middle one is the vagina or birth canal and the back one leads to the bowel. One purpose of these muscles is to support all the organs of the pelvis. They also have important strengthening bands in them; one makes a complete ring round the back passage and another a loop which is attached by its ends to the arch of bone in front and surrounds the two front passages. The purpose of these bands is to control what passes in and out of this part of the body.

'We shall be learning especially how to appreciate the control of these muscles, but you all know how to control them to some extent already—how to tighten the muscles round the bladder opening and the bowel opening when either of them are full, and how to relax the muscles to empty the bladder or to have your bowels opened when it's convenient to do so. In the same way, you know how to relax the vagina to admit your husband's penis, and then how to tense and relax it when making love.' (This can be a good opportunity to stop and discuss sex in pregnancy, if the class seems receptive.) 'In the practical part of the class we shall build up greater control of these muscles, so that they will be strengthened to take the extra weight during pregnancy, be able to relax to let the baby be born, and then recover well from their stretching afterwards.

### **Routine Antenatal Examinations**

The group will have been having routine examinations for some time before attending the classes, and these can profitably be discussed.

'Each antenatal visit includes the testing of a specimen of urine, recording blood pressure, and measuring the height of the womb or uterus. At some time there will be at least one vaginal examination, and at least one specimen of blood taken for examination. Later on in pregnancy the baby's heart-beat is counted at each visit and the position of the baby recorded.'

It is worthwhile to ascertain how many of the class have 'co-operation cards'. In some areas these are used when a general practitioner and a hospital share the responsibility of antenatal care. Each patient keeps her own card, in an unsealed envelope, and all examinations are recorded on it. This is an easy way of conveying information between the hospital and family doctor, but appears to cause additional stress to the pregnant woman. She, of course, reads as much of her notes as she can interpret—it would take superhuman restraint not to do so, as she wishes to obtain reassurance that everything is going well. Instead of this, she worries about the meanings of the abbreviations on the card. As one woman said, 'I look at my card and, if it says the same thing each week, I don't worry, but I've been worried all week'. Instead of 'Vx' her doctor had written 'cephal' so she only needed to be told that the terms were virtually exchangeable. We feel that all antenatal teachers should be familiar with abbreviated terms, and be able to show the recorded position of the baby with a model against her own body. But suppose the card records 'FHNH' and we are asked to interpret? If we do not do so it is comparatively easy for the information to be found in a library. When this situation arises the mother has usually stayed behind the rest of the class to talk, and can be asked what information her doctor gave her at the time of the examination. When one of us was confronted with this problem the mother said she had been told that the doctor could not find the baby's heart-beat and that she was to be sent to a special hospital unit for assessment. However, she could feel the baby move regularly. She had therefore answered her own question. Knowing that difficult situations could arise, each teacher has to consider how much interpretation she can give; the ethical way to behave would be to

refer the woman to her doctor or midwife. Alternatively, she could avoid seeing the co-operation cards, but this will still not prevent class members asking the meanings of terms such as ROA, LOA, posterior, brim, eng., and many more.

*Urine testing and pre-eclampsia.* 'The urine specimen has two main functions. The first is to check that no sugar is present. Sometimes, mild diabetes is discovered in pregnancy and special care with diet will be needed. The second is to check that no albumin (or protein) is in the urine. This could come from contamination by a vaginal discharge, which should be discussed with the doctor and may need treatment. The albumin is more important when it is in the urine itself, as it means that the kidneys are letting the protein into the urine instead of passing it to the rest of the body, and may be a sign of pre-eclampsia. Nobody quite knows why this begins, but it appears that the body is becoming tired of carrying the baby and at the same time living a normal busy life. The kidneys start to work inefficiently and besides letting protein slip through, they don't get rid of enough water so that there is a fairly large weight gain of fluid, usually starting in the feet and ankles. The technical name for this gathering of fluid is oedema. Then the blood pressure starts to rise, and the doctor will order a woman to rest, and sometimes prescribe sedatives, or medicine to get rid of the fluid. In pre-eclampsia it is essential to rest as much as the doctor recommends, and he may also advise a salt-restricted diet. However, from the beginning of pregnancy a woman can help herself to remain healthy by restricting her salt, being careful not to overeat, especially starchy foods, and being sensible about resting part of each day.'

*The blood specimen.* 'This is taken for several reasons:

'First, to find the blood group, in case at any time a woman needs a blood transfusion, but this is a rare thing to happen.

'Second, to see how much iron is in the blood. The baby takes a lot of iron, especially at the end of pregnancy, and if a woman's body is short of iron she will feel very tired and faint, be anaemic and generally miserable. That's why when iron is prescribed it is important, so keep taking it regularly. If one type produces discomforts—tummy pains, constipation or diarrhoea—another sort can be tried. No woman should stop taking iron because of these upsets, but let her doctor know. However, iron is much easier to digest if taken with a protein meal.' (It is useful here to discuss protein foods, and also foods rich in iron—liver, kidney, dried fruit, cocoa, egg yolks.)

'The third important discovery in the blood specimen is the Rh or Rhesus factor. If a woman is Rhesus negative and her husband Rhesus positive, the baby may be positive too; then the baby's blood will be different from the mother's. The afterbirth, or

placenta, which is passing food to the baby and waste material back to the mother, acts as a partial barrier between the mother's and baby's blood, like a sieve so that food can be exchanged without the blood mixing. However, sometimes a few blood cells get through the placenta to the mother, and her blood forms antibodies to them, because they are different, just like it would form antibodies to an infection. With good modern care this Rh factor is becoming less important. The time when the placental barrier works least well is in labour, so with the first child antibodies are rarely a problem. After the birth, blood is taken from the cord and tested. If the baby is Rh positive and antibodies have not built up, the mother is given an injection to immunise her from the baby's cells which have escaped into her bloodstream during labour. This injection's effect is brief, so she can start her next pregnancy as if it was a first baby, at little risk. Previously, as antibodies built up, pregnancy by pregnancy, they could get into the baby's blood, destroying blood cells and making the baby anaemic. Then a blood transfusion for the baby would be needed shortly after the birth.'

### **External Version**

'This is a fairly common manoeuvre, sometimes carried out in the doctor's surgery, but usually in hospital. Labour is more efficient and quicker if the baby is coming head first, so if the examining doctor finds the head bumping your ribs he will ask you to lie back and relax, then, with a firm pressure on the baby's head through your abdominal wall, and a hand guiding its bottom, he will stroke the baby round to a head-first position, pushing in the direction of the curve of the baby.' Demonstrate on a doll.

'If this is done too early the baby might just flip back again, and if too late may be too big to turn round comfortably. Most doctors who find the baby in a breech position attempt this manoeuvre at about 34 to 36 weeks of pregnancy. If you are having this done, and find it difficult to relax, a sedative will be given to make it easier.'

### **Decompression**

'This is rarely used nowadays. A decompression suit is made of airtight plastic, worn from chest to thighs, and kept away from the abdomen by a frame. A pump, which the mother can use herself, draws the air out of the suit, which tightens, creates a vacuum inside the frame, and raises up the abdominal wall. It was first used in South Africa to try to relieve pain in labour, but wasn't found to be very effective, both there and in experiments in this country. Then it was thought that if pressure was removed from the uterus for a certain part of each day in later pregnancy, the baby would get more oxygen. This seems true, as more blood seems able to flow through the placenta when the abdomen lifts. Claims were made that a child's intelligence could be increased by this extra oxygen supply, but were never proved. It isn't used now in a

normal pregnancy, but if the baby doesn't seem to be growing at the correct rate, because perhaps the placenta is small or inefficient, some doctors feel it will help the baby's growth by improving the blood supply if used for about half an hour a day'.

### **Ultrasonic Echo Sounding (Ultrasound)**

This technique of using ultrasound to obtain an echo picture (ultrasonogram) of the abdominal contents is being used with greater frequency today. It is particularly useful as there are no harmful effects whatsoever to mother or baby. It can confirm a pregnancy as early as two weeks after the first missed menstrual period, and twins as early as the third month of pregnancy.

It is replacing X-rays to a large extent as a diagnostic aid, as more can be learnt from ultrasound than from a straight X-ray.

In later pregnancy it can localise the position of the fetal head in cases of suspected malpresentation, and of the placenta, check the growth of a baby which seems small or large for dates, and diagnose fetal abnormalities. As the placenta's position can be accurately determined, ultrasound is sometimes used before amniocentesis (see below), thus the obstetrician can avoid touching the placenta when withdrawing amniotic fluid.

The teacher will probably be told by a class member that she has to go to hospital for 'special tests by sound waves' and the woman will be apprehensive about the procedure, even though, except in a suspected abnormality, she will have been given the correct explanation, such as 'We want to find where the afterbirth is' or 'The baby's a bit small. We'll keep an eye on how it's growing'.

The class can be told that ultrasonics are becoming a routine form of examination, and that any of them may be asked to attend hospital for this. A simple explanation would be:

'You will lie comfortably on your back on a bed. Your abdomen will be covered all over with oil. A large machine will be over the bed, and a small crystal which is attached to the machine will glide over the oil, up and down and from side to side. There is no discomfort and the only sensation will be a slight sense of touch. The sound which is transmitted is above the range of the human ear so you will hear nothing, but echoes of the sound waves trace a picture on a screen. This can show the size and position of both the baby and the placenta.'

### **Amniocentesis**

The technique of obtaining a small sample of amniotic fluid by paracentesis through the abdominal wall is being used more frequently today, and gives much information in certain cases. For instance, in Rhesus incompatibility the amount of bilirubin in the liquor can determine the seriousness of the baby's condition. Fetal cells are usually found in the fluid, and this can detect certain conditions such as mongolism. The sex of the baby can be identified and this is important if the parents carry genes of sex-linked congenital disorders. Towards term it can also estimate the maturity of the fetus, as sebaceous activity begins in the skin in late pregnancy, and this activity can be shown by staining the cells. Estimation of the lecithin/sphingomyelin ratio in the cells of the amniotic fluid also measures maturity, and the liquor may be tested for this before an induction, to make sure that the lungs are sufficiently developed for delivery.

One would normally not mention this in class, but if a question is asked about it one could say:

'Yes, sometimes the liquor that the baby is floating in is examined by inserting a needle through the abdomen after a local anaesthetic has been given. It is still a fairly rare procedure as complicated laboratory tests are carried out on the liquor withdrawn, and as yet there is not enough staff or money to do this often. If, for instance, a woman had given birth to one mongol child, and genetic analysis had shown that there were high risks of further mongols, she could have this procedure and the doctors would know for certain whether or not she was carrying another mongol. If she wasn't, there would be great relief for the rest of the pregnancy. If she was an abortion might be offered. This can apply to other rare conditions also. If the examination of the liquor were a quick, easy and cheap thing to do, it could be done in late pregnancy to find out if the mother's dates were correct, as the maturity of the fetus could be estimated by examining the cells and chemical substances in the liquor.'

### **Amnioscopy**

Again, this is rare, but an amnioscope can be passed through the cervix and the colour and, to a certain extent, amount of liquor can be assessed. If asked about this the reply could be that the doctor, by this examination, can estimate the baby's condition if he thinks all is not going well, as the liquor changes colour if the baby gets distressed.

## NEUROMUSCULAR CONTROL IN PREGNANCY

Each time exercises are taught it should be stressed that some of them can be practised while carrying out everyday tasks, for instance pelvic floor control can be practised sitting at an office desk, waiting for a bus, or washing up, so that the idea is firmly implanted that practising should not be restricted to just once a day, but done several times every day. We are trying to teach each woman to notice some of the hundreds of sensations which arise in her muscles and joints, to register them in her brain, and to transmit appropriate responses to other muscles and joints. For example, before we can improve a woman's posture, we must first make her aware of what she is doing with the different parts of her body. Only then can we teach her to modify the position of her head, the tilt of her pelvis, and so forth. Similarly, no woman will learn to relax at will until she can appreciate the different 'feel' of tense and relaxed muscles. It is a question of applying mental concentration rather than physical effort to appreciate this body-awareness, and some people find it more difficult than others. An analogy can be made in class of the conscious muscle-coordination needed to ride a bicycle or to swim, and how hard one had to think of one's arms and legs and balance. With practice the body begins to work in harmony until one acquires the art of cycling or swimming and can go on doing it quite automatically while thinking of something else.

The class should begin practising after using the toilets and removing constricting clothes. Tights, slacks or pyjama trousers save any embarrassment, and the teacher should also wear tights or slacks and be prepared to demonstrate.

The exercises described below cover only the basic minimum; an experienced physiotherapist would include a good deal more. Readers are referred to books and pamphlets by McLaren (1973), Montgomery (1969) and Williams (1969).

*To tone the muscles supporting the breasts.* Get the mothers to sit in a comfortable position on their mattresses, not supported by pillows, then proceed as follows.

'Clasp your hands together, palms touching, fingers upwards, and elbows at right-angles to the body, about shoulder height. Press your hands together as hard as possible—harder—hold it—relax. Remain in the same position, now repeat the pressure—harder—hold it—and relax.'

The teacher should check that the class really does feel the 'lift' at each side of the chest.

*Breath control.* The women are asked to put their hands on their lower ribs (or just above their vanished waistline). The teacher's request then is, 'Breathe out, feel your fingers coming together. Now let your chest fill with air again and notice how your hands are pushed apart'. While they are breathing in this controlled fashion the teacher should watch that they are breathing easily and regularly, and discourage them from trying too hard, probably saying something like, 'Just gentle, easy, deep breathing, to your own rhythm'.

*To strengthen abdominal muscles, combined with pelvic rocking.* The women are asked to lie down on their backs, heads and necks well supported and knees bent.

'You are now going to pull your tummy in so that you pull the baby towards your backbone and at the same time press your backbone to the floor. Ready—pull—in, let—go. Notice the different sensations. Did you feel how your pelvis tilted up in front when you flattened your backs, and tilted down when you relaxed and your backs hollowed a little?' (The teacher can demonstrate by moving the model pelvis or a basin, at the same time rocking her own pelvis, and the class can feel their hip promontories moving when they do the exercise.) 'This is called pelvic rocking and can be done in lots of different positions, lying on the side, sitting or standing. This exercise keeps your tummies from getting overstretched and helps to relieve the kind of backache which you get from sitting or lying too long in one position. Practising relaxation of the tummy muscles will enable the doctor or midwife to feel the baby's head more easily and give you less discomfort when they are examining you'.

### **Relaxation**

This is one method of becoming aware of tension and its release. The women lie on their backs, heads and shoulders well supported, and a pillow or bolster under their knees so that they are slightly bent. The teacher should check that she can see all the class and that they are all comfortable. When satisfied with this she can begin.

'Now you are going to learn how to relax. Just bend your right elbow a little—stop bending it and let go. Notice that your muscles feel different when they are pulling from when they stop pulling and let go—that is, relax. Try again, but this time tighten the arm

muscles without actually moving, as if you were going to bend your elbow. Relax the muscles, put your other hand on your upper arm and feel the difference. Feel that your arm is heavy, resting and comfortable. Now the shoulder muscles. Lift your arm away from your body, and let it fall. Tighten the muscles without lifting, let them relax, feel comfortable and notice the difference in sensations.

'Now tighten your shoulder, elbow, wrist and hand so that your whole arm feels hard and tense. Let go. Repeat with the other arm. Tighten the muscles of one leg, let go. Repeat with the other one. Tighten your tummy muscles, let go. Hollow your back so that the two columns of muscle on either side of your spine stand out in hard ridges. Let go and feel your spine go slack as if you are resting in an old deck chair. Screw up your face in a horrible grimace, let go and feel the tension going from your mouth, your eyes and your forehead so that all the lines disappear and your face has no expression.

'Notice that you tend to hold your breath when you go tense and breathe out when you relax. Now, breathe in, hold your breath and make your whole body rigid, give a big sigh out and let the tension flow out of your arms, legs, bodies and faces. Breathe a little more slowly and deeply than usual, just enough to make you think about the rhythm of your breathing, and each time you breathe out try to get rid of a little bit more tension.'

When the class are able to appreciate their widely differing sensations when they are in a state of complete tension followed by complete relaxation, the teacher can ask them to move a little, then simply to breathe in, out and relax completely without any preliminary tension so that they can learn to differentiate between the normal slight movements and tensions and complete controlled relaxation.

The women are then asked to turn on their sides and to repeat the exercises. Some will like to have their lower arm extended behind them, others are more comfortable with it underneath them. In any case they should have their upper leg bent more than the lower one, so that both legs can rest and the abdomen is partially supported by the mattress. More pillows may be needed under the abdomen and upper leg.

Teachers are referred to Eileen Montgomery's book *At Your Best for Birth and Later* for a more detailed description of this method of teaching relaxation.

Later, special effort should be spent on the pelvic floor, so that each member of the class becomes aware of the sensation of tightening and relaxing the muscles round the anus, and the urethra

and bladder. The anal sphincter is the easiest to control, so the women are asked to imagine the ring of muscle deep inside the back passage and to tighten this ring so that the passage closes. Control of the vaginal sphincter can be learned simply at first. 'You're on top of a bus and longing to go to the lavatory. Pull in underneath. Now let go. Feel that the muscles have become softer, with no resistance.' If some are not sure of the sensation they can be asked to try occasionally, when their bladders are full, to stop a flow of urine in midstream, record the sensation of tightening, then feel the release as they begin to urinate again. They can also be encouraged to tighten the whole muscle sling as if going up in a lift, slowly, one floor at a time, getting extra tightness floor by floor until the fifth or sixth floor is reached, then slowly down, releasing a little more at each floor until the ground floor is passed and the basement is reached with awareness of complete relaxation. The class is then asked to tighten a little, as if reaching the ground floor again and to leave the muscles in their normal state of tone. The muscles of the thighs and buttocks should not be brought into play.

During the exercises for pelvic floor control the teacher can discuss how a relaxed vagina makes a vaginal examination more comfortable. She can also explain the importance of this examination—how it is sometimes used to confirm the pregnancy, but is mainly to estimate the size of the opening in the pelvic basin. Some women have been perturbed to see a doctor's fist approaching their pelvic floor, only to find that the fist is simply pressed against the muscles. The size of the pelvic opening can be estimated by this simple manoeuvre also.

After the tension and release exercises the class should not be left for more than a few minutes to rest. We are teaching muscle control and are not anxious to encourage sleep. The class should, however, get up very slowly, as after even a short period of relaxation, quick activity can cause dizziness. So the teacher continues thus:

'Take a few deep breaths, then pretend you are large tabby cats in a patch of sunshine. Stretch, luxuriate, and wriggle until you are ready to get up. Then, if on your side, put your top hand on the floor, push up first with this hand and then with your under hand until you are kneeling on all-fours. Change to half-kneeling, with one foot on the ground, then stand up. If you had been lying on your back, you would have bent your knees, rolled over, and then come up from a side position to avoid strain on the tummy muscles.'

**Correct Posture**

With the class standing—

‘Let me see how you stand when you are tired. Now to get a good standing position instead of slouching, grow as tall as possible, feel as if you are being pulled upwards by a string through the crown of your head, keep your bustline in front of your tummy. Brace your tummy and tail muscles slightly as if you are wearing a good belt. Adjust your balance so that your weight falls evenly between the heels and balls of your feet. Take a look in the mirror when you are standing like this, and notice how much better you look.’

Similarly the women’s sitting positions are checked. The teacher then demonstrates wrong and right ways of picking up objects from the floor and the class then practises.

‘Show me how you would pick a pin up from the floor. Bend your knees with one foot a little in front of the other, legs a little apart. Keep your back straight. Pick up the pin, straighten the knees and rise up. If you want to pick up a bucket or basket with one hand, stand close to it with the foot opposite to the hand with which you are going to lift, in front.’

The class practises with pillows.

At the end of the exercise session the class is reminded of each exercise, asked to practise several times a day and to think about their muscles, so that they become aware of their body sensations when not practising.

**TIMING OF TEACHING ABOUT PREGNANCY**

The talk about pregnancy, and exercises for pregnancy, are given as early as possible. Some teachers are able to arrange a class very early, shortly after the pregnancy is confirmed, but most will find that this teaching has to be given in the initial class of the set series, i.e. during the third trimester. Group discussion on thoughts and feelings, adjustments and difficulties, will continue throughout the course, however, and there is no attempt to confine this discussion on pregnancy to the initial classes. The women want reassurance about what is happening *now*, and as they get to know each other, and lose inhibitions, the discussion develops week by week, following different patterns in each course.

## AIDS FOR MOTHERS

*Nursing Brassieres.* Mava Bra. In one-inch sizes from 32 in. to 44 in. and four cup sizes. Available from Mava Bra Department, National Childbirth Trust, 9 Queensborough Terrace, London W.2.

*Support Tights* made to measure by Contex (Lingerie) Ltd, Barton House, Priestic Road, Sutton in Ashfield, Nottinghamshire.

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## CHAPTER 6

# Discussion of Normal Labour

It might be thought that two healthy young women who had both attended classes, had normal pelvic measurements, and babies of similar size presenting in a favourable position, would have similar labours, but we know that this is far from the truth. One will have a quick, straightforward labour with little pain, the other may have a much longer, more difficult labour and will react badly to the whole process. It is very hard to tell whether her attitude of mind is causing her apparently physical difficulties or *vice versa*.

It seems that even a first labour cannot be regarded as an isolated event in a woman's life. It is the culmination of her whole psychosexual development up to this time and her reactions to it will depend on her upbringing—particularly on her relationship with her mother—on her personality, and on her reactions to her bodily functions. If she has a wise mother who has spoken of birth as an exciting and worthwhile experience she will tend to expect the birth of her own child to follow this pattern. If her mother has encouraged her gradually to develop her independence she will approach any of the problems of birth or child-rearing as a mature woman, whatever her age. If, however, she has led a restricted life, continually dominated by a possessive mother, she will seek for a great deal of support from her antenatal teacher during pregnancy and her midwife or doctor during labour. Such women may behave well during the early phases of labour but blame the midwife who often plays the role of substitute mother to them and become angry and uncooperative if they meet with difficulties.

The personality of the woman and her relationship with her husband or partner also plays a great part in her reactions to labour. The passive, feminine type of woman accepts the first stage of labour well but may become very disturbed by the turmoil of the second stage. The more active and aggressive types find the comparative inactivity of the first stage hard to tolerate and may become abusive to their husbands or midwives but enjoy the effort of the second stage. A few very masculine women react in a different

way, 'they consider childbirth an indignity imposed upon women by nature, an injustice that must be corrected' (Deutsch, 1947). Naturally they refuse to endure any pain or to participate in the delivery, they feel that it is the task of the obstetrician to make everything pass as quickly and painlessly as possible.

Niles Newton (1971), a well-known American psychiatrist who has worked in close collaboration with her obstetrician husband, believes that coitus and labour have many similarities and that the experience of the latter may be foretold by the girl's reaction to lovemaking.

When discussing a woman's expectations of birth, the influence of her peer group and of the mass media is not always appreciated. She may well demand an epidural anaesthetic because several of her friends have had one or announce her intention of nursing her baby in imitation of a famous film star.

Antenatal classes tend to attract those people who want to understand and play an active part in the experience of birth, but we shall have women of diverse upbringing and many different personality types. All those who work with pregnant women should be aware of the psychological as well as the physical factors which may influence their labours. We need to resist the temptation to play the amateur psychologist unless qualified to do so, or to expect that we shall change attitudes arising from deep-seated problems of upbringing or personality. We may, however, observe the effects of some of these during individual and group discussions and the interactions of class members with each other and with their husbands at fathers' evenings. Since it is our privilege to spend longer with these parents than any other member of the antenatal team we can sometimes spot and report reactions which we believe to be particularly unfavourable.

It is our job to relieve superficial fears arising from lack of knowledge about the processes and handling of labour, thus making the end of pregnancy happier and to stress the satisfaction and joy in achievement of the birth of a child, reinforcing this aspect with any visual material that we use. By subtle manipulations of the group we can attempt to modify the aims of the extremists, trying to arouse interest in participation in some part of the process in those who just 'don't want to know'. And to point out to those who picture themselves watching the birth of their babies in a state of undrugged bliss that there may be medical reasons either for them-

selves or their babies why sedation or instrumental help may be necessary.

There will also be many middle-of-the-way people who are much less biased, who want to prepare themselves physically and mentally for the differing types of experience they may meet and to learn to help themselves and those who are looking after them to the best of their ability. By creating a realistic, purposeful atmosphere—hopeful but not rose-coloured—we hope to give confidence that they can cope with whatever their labour pattern turns out to be. In every case we must try to understand the goals that women and in some cases their husbands set for themselves, and beware that we do not replace these with what may turn out to be equally unrealistic ones of our own.

### **What Does a Woman Want to Know about Labour?**

1. What changes are going to take place in my body and how will I recognise their beginning?
2. What will they feel like and how may I react?
3. How will the staff look after me and what will they ask me to do?
4. How can I help myself?

As with the classes on pregnancy these points can be covered by talks, discussion and the practice of neuromuscular control.

### **METHOD OF PRESENTATION**

Some teachers may wish to give a brief run-through of a normal labour and then break it down into stages considering each in some detail. Others prefer to divide the subject into three or four parts, discussing the physiology, psychology, management and self-help for each part, and so gradually building up a picture of the whole over two or three weeks. A few technical terms such as effacement, dilatation, expulsion and episiotomy, used always in conjunction with the lay term or a simple explanation, help to dispel some of the professional mysticism. A series of simple diagrams on the board, such as those in Fig. 4 in which the vaginal plug is removed with the sweep of a duster, the membranes rupture, and drip chalk drops down the board and the cervix dilates most realistically, make their point vividly and unemotionally. If one cannot draw, flannel-graphs or commercially produced pictures such as those from the Dickinson Belskie Birth Atlas or the Cow and Gate mothercraft

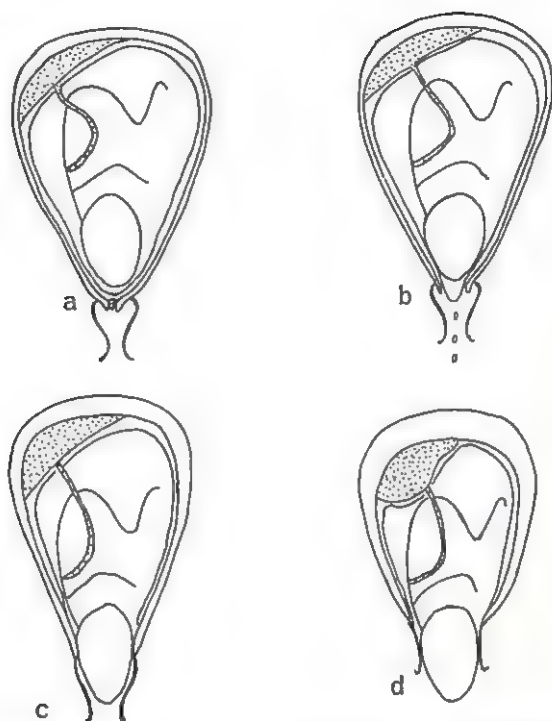


FIG. 4. Simple diagrams of birth: a, early first stage; b, late first stage; c, second stage; d, birth of the head.

charts are useful. We prefer the former since the baby looks much more attractive and the pictures of dilatation are larger. At the end of this chapter are some points which may be useful when 'talking through' the Birth Atlas. A pelvis, the models of the knitted uterus, and the baby and bowl or box described in Chapter 3, help in creating three-dimensional pictures. Each teacher, in her own way, needs to give her group something beyond the basic mechanics of the process and to inspire them to think about the wonderful design of their bodies and feel pride in being women able to give birth to a child.

*Pre-labour stage.* Possible signs: frequent contractions, weight loss, less activity from baby, spurt of energy in mother, wind in bowel sometimes with slight diarrhoea. Final arrangements and packing—keeping up morale.

*Onset of labour.* Final preparations, clothes and equipment needed. Variability of signs, excitement that waiting period is over, some apprehension, early contractions, what they do and what they may feel like—differences for multigravidae—what to do at home, when to go into hospital or call midwife.

*Middle and late first stage.* Dilatation, increase in length and strength of contractions, acceptance of these (they have a job to do), admission procedures, different types of sedation and analgesia, uses and effects. Methods of monitoring mother and baby. Transfer to delivery suite according to hospital routine. Symptoms of approaching end of dilatation—frequency, strength, unevenness of contractions. Beginning of pushing reflex and ways of controlling it. Feelings of irritability, possibly of being trapped. Heat, chill, shivering, nausea.

*Second stage.* The delivery suite should have been familiarised through visit or pictures. Change in quality and function of contractions, mothers' activity in harmony, other sensations akin to pushing. Change in sensation as head comes down on perineum, feelings of opening, description of episiotomy and reasons for it (see Chap. 6). The birth of the baby demonstrated either with doll and pelvis or doll and box, panting and relaxation to 'give birth', baby's appearance, possible reactions to it. How it is cared for.

*Third stage.* Delivery of placenta, making mother and baby comfortable.

It is not possible in a book of this size to enlarge on all these points, but later in this chapter will be found suggestions for dealing with some of the subjects which seem to offer problems to new teachers.

### **Physical Signs and their Management (Topics 1 and 3)**

Talks both on the physiology of labour and on its management may be given by the antenatal teacher providing she has a sufficiently close liaison with the delivery team; otherwise it is better that the conduct of labour should be discussed by the midwife or doctor who will be responsible for it. When it is not possible to make arrangements of this kind, then it is essential that the teacher should do everything she can to familiarise herself with current practice in the units where her students will be delivered, and if she is herself a midwife she must realise that some of these practices may be very different from her own. Difficulties sometimes arise in

this country between local authority and other classes not closely associated with the maternity hospitals and even in some instances inside the hospitals themselves when several members of the staff have differing philosophies. One of the most striking things we have noticed about psychoprophylactic preparation in France is the complete integration between training and practice.

### **Sensations and Reactions (Topic 2)**

If the group are all primigravidae discussion on sensations and emotions cannot be dealt with in the same way as during the pregnancy classes, since labour is an unknown experience, but the group can be led to consider some of the factors in their lives which may influence their feelings about giving birth and to think about the solutions they may have found to other stressful situations they have had to deal with. If there are multigravidae in the group they will naturally talk about their previous experiences and even if these have not always been happy, they can usually be discussed in such a way as to offer a positive learning experience to the others. The women will undoubtedly be told horror stories by friends, relations and other expectant mothers awaiting their turn at the antenatal clinic; it would seem to be better to have some of these skeletons removed from their cupboards into the light of the classroom and looked at dispassionately. There are, however, a few multigravidae who need to unburden themselves without any thought for other people's feelings and these may benefit greatly from a private session with the teacher. If she is herself a mother, her talks on labour will be much more vivid, but she needs to beware of describing the whole process in terms of her own experiences. She may paint a more comprehensive picture by including anecdotes about other labours she has seen, reading letters from previous students, or inviting women from other groups who have had their babies to come back and talk about their experiences. Members of the group are usually very ready to ask questions or to join in the discussion, citing incidents told to them by friends and relations. Slides, films and tape recordings of labours can be very useful in triggering off discussion but they are highly emotive and need to be chosen and used with great care (see Chap. 3).

### **Pain in Labour**

When describing labour to parents perhaps one of the most

controversial points is whether or not to use the word *pain*. The Russians believe that women are conditioned to expect labour to be painful by their mothers, their friends, the books they read and the films they see. They therefore interpret any unusual sensation in labour as pain and one of the aims of preparation is to decondition this 'labour equals pain' concept. On the other hand, what are the effects on a woman who has been led to expect only discomfort which she can control if she experiences sensations which to her are really painful? She may be frightened that something is going wrong with herself or her baby, guilty that she cannot fully control this unpleasant sensation and resentful towards her attendants.

We believe that most women do experience what they would describe as 'pain' at some time during labour and it is therefore better to use the word occasionally so that they may learn more about its manifestations, discuss them and come to terms with them. On the other hand, it seems unnecessary to reinforce the conditioning which certainly does exist by describing every contraction as 'a pain'.

In the past, labour has sometimes been looked upon as a punishment for indulgence in sexual pleasure; indeed, even today, this concept is not quite dead when the mother is unmarried. It used to be something to be got through as quickly as possible and then forgotten, but now we try to present it as a challenging and exciting experience. It may involve pain, it will certainly involve patience and effort, but offers to most people the tremendous satisfaction of a job well done and the joy of bearing a living, healthy child.

Based on retrospective analysis of their patients, some psychiatrists believe that it is a disservice to women to deprive them of all birth sensations. Helene Deutsch (1946) says that, 'At bottom, despite her protests and pleas to be relieved of all pain, the woman wants to fight the birth pains largely with her own resources and is ready to accept a certain amount of pain for the source of the fullness of her experience'. We have certainly observed that women who have either been unconscious or very dazed at the time of birth seem to take longer to achieve a relationship with their babies. It is equally true that memories of severe pain or distress may mar the mother-child relationship. Perhaps the continued development of epidural analgesia, in which pain is relieved but sufficient sensation of the contractions remains for the women to take an

active part in the second stage, is the answer, certainly during difficult labours.

### **Helping Oneself in Labour (Topic 4)**

This is concerned with building up the mother's morale during the talks and discussions so that she has a good idea of what to expect, including the different kinds of support that will be offered by the labour unit staff, and is able to accept a number of possible patterns. By increasing her awareness and control of her own body, she feels confident that she can trust in it.

Each teacher will suggest specific methods of coping with labour based on her own experience or chosen theory. She may believe with Grantly Dick-Read that a normal birth is almost painless if it is not complicated by fears and tensions; or she may agree with the proponents of psychoprophylaxis, that sensations of pain are learned responses which can be modified by verbal conditioning and activity. Alternatively she can accept, as we do, that a woman must look forward to many strange sensations in labour, some of which are likely to be painful, and that each individual will react differently according to her upbringing, her personality and the way she is handled. What *we* can do is to offer a number of tools and encourage her to practise with them so that in labour she can use the ones that are appropriate to her individual position. Passive women may accept the transition stage using relaxation and breathing techniques with or without the help of gas and oxygen. More aggressive women may gain more help in getting rid of some of their tensions by physical activities such as tapping, counting or mouthing a tune. Massage from her husband, either for its pain-relieving effects or simply as an expression of loving sympathy may give one woman the support she needs, while another, who is receiving epidural analgesia, may need extra help in understanding and controlling her body in the second stage.

## **USEFUL EXPLANATIONS**

### **Contractions—Their Job and How to Cope with Them**

The subject might be introduced by asking the class how many of them have noticed that their tummies sometimes become very hard and may even point forwards slightly. This happens when the muscles of the womb have a practice session several times a day.

The feeling can usually be differentiated from the baby's movements since it is a slow tightening which may last a few seconds or even a few minutes before it slowly fades, whereas the baby makes rapid 'fish like' flips or sometimes gives really hard kicks. Members of the group who have felt these Braxton-Hicks contractions will describe them in different ways to help the others also to become aware of them. They will usually agree that the contractions are not painful unless they occur when the bladder is full but are by no means sensationless. One can then continue as follows.

'When labour begins, contractions are usually felt at fairly widely spaced intervals, may be quite weak and last only 30 to 45 seconds; as it progresses they gradually become longer, stronger and closer together. The early ones, and for some lucky people a large proportion of all the contractions, feel like those they have experienced during pregnancy, that is, a tightening, squeezing sensation of their tummies, for others they become uncomfortable and may become really painful. The sensation may be similar to the deep cramp-like ache of a period pain, it may be a low backache or occasionally an ache in the thighs.

'The sensation, whatever form it takes, is wave-like, it starts from nothing, increases to a peak, then dies away again. Except in unusual circumstances you will be quite comfortable during the intervals between contractions, and when these are long you may like to occupy yourself by moving around, reading, knitting, watching television, or talking to your husband. Later, as the contractions follow each other more closely, you will want to use the intervals to rest and gather your forces to cope with the next one. Some women do not have, or do not feel, any weak, widely spaced contractions—their labours start suddenly and their contractions come strongly at frequent intervals from the beginning; this is a common pattern if labour is started by the doctor (see inductions, Chap. 7).

'During labour the muscles of the womb, or uterus, have the power to contract and shorten, then to relax but remain in the shortened position. This results, first of all, in the gradual thinning out of the thick fleshy area round the cervix or neck of the womb and then in its gradual opening, and goes on until the cervix is wide enough open to allow the baby to pass through into the birth canal. This point is known as the end of the first part or first stage of labour.' (Demonstrate with diagrams, the hands, knitted uterus or offer the simile of pulling a polo-necked jersey over the head.) 'When you have had one baby the cervix does not become thick again so that it begins to open soon after contractions start and the first stage of labour is usually shorter. During the second stage of labour, the upper part of the uterus pushes down on to the baby,

gradually pressing it along the birth canal and out into the world. These contractions may be quite painless but feel that one has a tremendous piston inside one's body which makes one want to hold one's breath and go with it. Some people describe the sensation as similar to being constipated, getting half way through a motion and feeling that one *must* finish it, others as being an uncontrollable force like a hiccup, except that instead of something in one's body flipping up, it is a more sustained downward pressure that one feels.'

Thus we hope to establish contractions as a purposeful activity of the body, not as some useless disorder. In other circumstances, pain is feared and resisted as an indication of something wrong; here we can associate it with the progress of the baby along the birth canal, until it is hoped that a woman can say, 'Yes, I feel pain but this means progress and the contraction is the important thing, I must let it work'. It must be made clear that every woman has her own pattern and this may well be different for different babies.

*Coping with first stage contractions.* 'If they become uncomfortable your immediate reaction will probably be to hold your breath, clench your hands and teeth and stiffen up all over to 'fight' the contraction. This is unhelpful for the following reasons. First, if you hold your breath you deprive your uterus of oxygen and if you tighten up a lot of unnecessary muscles you may deprive your uterus of some of the blood that it needs; you will get tired and your uterus may work much less efficiently. So we try to relax all unnecessary tensions and to breathe easily and regularly. Secondly, our brains work rather like a telephone exchange, they will only register clearly one message at a time. If you lie there concentrating on the contraction, wondering how much it is going to hurt, wondering if you are going to cope, all the messages coming from your uterus will travel up your spinal cord and will almost certainly gather together in your brain and be registered as pain. If, on the other hand, when the contraction starts you have practised a definite pattern of activity, for example a certain type of breathing combined with commands to the rest of your body not to tighten up in sympathy with your uterus, these messages will also be registered by the brain and if their focus of activity is strong enough they will "block" some of the pain messages. During the latter part of the first stage it is not always possible to do this completely and you may need other kinds of help that we will be talking about, but the main line of defence is yourself and you can undoubtedly make labour either easier or more difficult for yourself.

'In the second stage of labour your behaviour will be quite different, you will be encouraged to cooperate with your contractions by using other muscles to augment the activity of your uterus so that your baby can move smoothly along the birth canal.'

## Drugs During Labour

As with all other aspects of the management of labour, it is important that the antenatal teacher should be in close touch with the methods in current use in her labour wards and should fit her remarks to these. A discussion of epidural analgesia is obviously quite pointless if this will not be available to the mothers, and it is equally useless to spend a lot of time experimenting with the effects of an Entonox apparatus if this is very unlikely to be used. A description of an epidural analgesia and its effects is given in Chapter 6. Other forms of medication might be talked about thus:

'You may be offered various kinds of drugs to help you cope with labour. These are of four main kinds: those that help you to rest or sleep, those that relieve anxiety but do not make you sleepy, those that relieve pain and those that help you to forget unpleasant sensations. The important analgesics, or pain-relieving drugs, may work on the whole body by circulating in the blood and blocking the brain's reception of painful sensations; or by numbing a local nerve as the dentist does before filling a tooth. Lastly, it is occasionally necessary to give a general anaesthetic if the baby needs to be turned or to be got out in a hurry. Doctors have to keep this possibility in mind, and you may therefore be forbidden to eat when in established labour, and your intake of fluids may also be restricted. This varies in different hospitals. Some will only allow small sips of water and mouth rinses, while others will encourage drinking.

'The drugs may be offered in one of several ways; simple ones such as sleeping pills are given by mouth, others are breathed in through a mask. The stronger drugs are usually given by injection into a muscle or occasionally, if a very quick effect is required, the needle may be put into a vein. People vary quite a lot in the way they react to different drugs, but it is usually found that a woman who is in a calm and receptive frame of mind requires a smaller dose than one who is very tense and agitated.

'All the drugs at present used in maternity work pass through the placenta into the baby's blood stream, and the powerful ones may make him sleepy and less able to breathe readily. Doctors and midwives have therefore to balance the good effects on the mother with possible bad effects on the baby and are very careful in the amounts they give and the time at which they are given. If you know that you are particularly susceptible to drugs or alcohol and think you would like to remain alert during labour, do discuss this with your doctor beforehand, as he may be willing to keep this in mind when choosing what drugs to give you for your comfort, on the understanding that it might be necessary to give you something stronger if your, or your baby's progress is not satisfactory. During

pregnancy you will be examined to make sure that you are quite fit to receive any medicine that may be prescribed during labour, and asked to name any drugs that you may be taking at the moment. Do reply honestly to this question because some drugs and tranquillisers can lead to unpleasant effects if mixed with analgesics during labour.'

*Common drugs.* 'The two commonest drugs used during labour are pethidine and nitrous oxide. Pethidine is usually given by means of an injection into the leg or seat when labour is well established, if the contractions are becoming painful. The usual dose has the same effect on most people as alcohol—it makes them more relaxed, less sensitive and their troubles are seen through a slightly rosy haze. You should still be able to control your breathing and muscular activity with the contractions feeling more comfortable. If the injection is given into the muscle it takes about 10 to 20 minutes to reach its full effect and wears off gradually over the next two to three hours. You will probably be asked to lie on your side after the injection and not be allowed up to go to the lavatory.

'Pethidine may be mixed with other drugs which relieve tensions due to anxiety as well as pain, or have the effect of taking away memories of what has been happening. It is better for the baby if pethidine is not given too close to its birth, and therefore your doctor or midwife will need to decide if it is appropriate to the stage in labour you have reached. If by any chance the baby is born sooner than was expected an injection can be given to minimise the effects of the drug. Sometimes in a difficult labour or if the mother's blood pressure is too high, larger doses of pethidine are necessary. These may make her very muzzy and sleepy for a time, but after she has had a rest the uterus often works more efficiently'.

*Nitrous oxide.* A midwife can show the Entonox machine to the group and let them try it out either in class or at the hospital where they are booked for confinement, or failing this, they can see pictures of the apparatus in use. During a labour rehearsal the two hands can be cupped over the nose and mouth to simulate the mask so that the class can practise breathing deeply into it as soon as they imagine that a contraction is starting. The time lag of three to four breaths between starting to breathe the gas and its taking effect should be stressed, also the fact that it is under the mother's control and is harmless, making it safe to use right up to the time of the baby's birth.

### **The End of the First Stage of Labour**

This is always difficult to describe since one is trying to make it

sound tough without being too frightening. Here is one way of handling it.

'Some women seem to pass quite smoothly from the first to the second stage of labour: they begin to want to push, are encouraged to do so and the baby moves down the birth canal and out into the world. Others have a difficult time during this 'transition' phase. You may be hopeful that the second stage is approaching when you notice a marked increase in the length and strength of contractions. If the bag of waters has not broken it may do so now, or be broken by the midwife; some leaking of watery fluid or spotting of blood is common. Sometimes contractions become uneven: you may have a big one then a small one or one that works up to its peak, begins to die away again, then just as you think you have coped with it, it comes back and hits you again. Some people describe this phase of labour as rather like trying to swim in a rough sea, you feel a bit battered but if you swim with the waves you emerge triumphantly into the calmer waters of the second stage.

'Other signs are a feeling of pressure on the tip of the tail bone at the height of contractions or a feeling of fullness in the bowel which makes you think you want to go to the lavatory but is in fact the pressure of your baby's head. You may find yourself burning hot, or shivering as if cold, making queer rumblings in your tummy or even occasionally feeling sick. Some women, who do not know much about labour, only really face up to the fact that they are going to have to go through with it at this stage and consequently feel trapped. You may hear somebody calling out that she doesn't want to have a baby today, and even you may find yourself getting rather short-tempered with the midwife or shouting at your husband.

'The best sign of all is the beginning of the pushing feeling, which was described when we were talking about contractions. This may mean that the neck of your womb is wide open and you will be told to go ahead and push, or you may not be quite ready yet. Sometimes the pushing feeling starts before the front rim of the cervix is completely drawn up, so that if you pushed too soon you would be trying to push your baby through a door that is not quite wide enough.' (Demonstrate with the clenched fist of one hand, trying to pass it through a space made by the index finger and thumb of the other hand.) 'You will therefore be asked not to push and may handle these contractions either with broken rhythm breathing' (demonstrate hoo, hoo, ha breathing—see later) 'or by using the gas and oxygen mask with deep sharp breaths. Other women feel that they need more mental or physical activity to counteract these very strong contractions. If you are one of these, you may help yourself by tapping the rhythm of your breathing; by counting up to the peak of the contraction, knowing that when you have reached a certain number the pain will begin to go; or by mouthing and tapping a tune. Even a good swear or a groan

can relieve a lot of tension but do remember that a lot of noise will depress the other patients and annoy the staff. Between contractions the midwife may ask if the first-stage ache of the contraction has become more of a pushing feeling. She will watch your perineum for signs of bulging, and may examine you vaginally to be sure that the cervix has been pulled up completely.

'At last she confirms that you can start to push.'

### **The Second Stage and the Birth of the Baby**

'Now "labour" is indeed a true word. We shall be practising in detail the positions and breathing for this, and it can be a satisfying and exciting time, of sheer effort during contractions and rest between them. The midwives will be tremendously encouraging. Some women consider this to be bullying, but if you can imagine your helpers as cheer leaders, or crowds encouraging an athlete, you will realise that they, by becoming involved in this emotional experience themselves, are helping you to overcome your tiredness and make the most of each contraction. The rectal sensation changes to a vaginal sensation as the baby moves further through the vagina, and soon in a contraction you will be able to feel the head moving down, and slipping back a little as the contraction ceases. This "two steps down and one back" action helps the vagina to stretch more easily. Remember it is very elastic, and the baby's head, which is quite soft and only measures about 9.5 cm or 3.75 in. across, can stretch this elastic vagina bit by bit with each contraction, providing that you know how to work effectively and are prepared to "go with" the contraction and not hold back, which would cause tension and pain.

'Soon the midwife is telling you the colour of the baby's hair, and showing with her fingers' (demonstrate) 'how much of the head she can see.' Teachers should again be fully aware of local conditions—some hospitals will use a routine local anaesthetic at this point, whether an episiotomy (see Chapter 7) is performed or not.

'She will ask you to listen to her carefully, and issue orders to "push a little" then "relax and pant"'. Again we shall be practising this in class, and you will get the feeling, with practice at home, of real pelvic floor relaxation, so that the vagina can stretch without resistance. As you pant the head is born, and a few seconds or perhaps minutes later the shoulders slip out, followed by the warm soft slippery body. You will see the baby being held up by his feet, which gives you a chance for a quick look at him, then he will be put at the bottom of the bed, more or less out of view, while the cord is cut and the ends tied. We'll call him male for convenience, but of course one of the thrilling moments is when you see whether you have a boy or a girl. It would be lovely now if you could immediately hold him in your arms, but you have to wait a little while. The midwives want you to have the healthiest possible baby, and work for a few minutes to achieve this. First, a tube is put into his

throat, because he might have swallowed some mucus or fluid as he was being born and he won't be able to breathe properly with a blocked throat. A suction machine is usually used with the tube and you will hear its noise, then the baby crying vigorously, although of course some babies will cry immediately they are born. His breathing, pulse rate, limb movements, cry, and objections to being handled are all checked, and then he is wrapped warmly. He gets two points for perfect performance in each of these tests, so could get a total of 10 points. This is called the Apgar score as it was suggested by a Dr Apgar. Most babies will be below 10 at first, so may be given a little oxygen to revive them. Birth, after all, is tiring for the baby too. He is put in a warmed cot with his head down to drain any more fluid from his mouth and left to rest and recover. After four or five minutes his Apgar score is usually nine or 10 and he can be put into your arms.

'During those few minutes another midwife is busy with you. An injection will have been given in your thigh muscle after the birth of the head to cause a strong contraction, which you won't feel at all. The midwife rests her hand lightly on your abdomen and when she can tell by the contraction and the position of the uterus that the afterbirth or placenta has been squeezed out into the vagina, she gently levers the cord and the placenta slips out, feeling like a soft sponge. She puts a pad between your legs and may ask you to put your legs straight down and cross your ankles. By the time you have been covered warmly and your pillows made comfortable the baby is ready to be cuddled'.

## NEUROMUSCULAR CONTROL IN LABOUR

### Relaxation

A first approach to the teaching of muscular relaxation by the contrast method has already been described in the chapter on pregnancy. However, it soon becomes obvious that a greater awareness of tension and degree of its control is necessary to cope with labour than simply learning to relax in comfortable conditions surrounded by known faces. Although the kind of relaxation practice in which the women are left to doze while the teacher goes away to make a cup of tea makes a restful interlude in their day, we do not believe that it is an adequate preparation for dealing with the challenge of labour or other difficult life situations. To do this it is necessary to accustom them gradually to relax in various conditions of stress. The following exercises can conveniently be practised in pairs, the mothers being encouraged to choose a different partner at each class so that they all get to know and help

each other and to learn more about their bodies. Having seen that half the class are lying comfortably supported by as many pillows as needed, and the other half are sitting or kneeling beside their partner, the teacher can demonstrate on one woman whose relaxation she knows is fairly good and who will not be embarrassed. Then proceed thus:

*Relaxation when moved.* Ask her to tighten her right arm and to note the sensations coming from her muscles while you feel them hardening under your hands, and then ask her to relax her arm so that both of you can feel the difference. Hold her hand just above the wrist, lift it and see whether her hand hangs limply off the end of her arm. Bend and stretch her elbow and see if the arm feels boneless (like a marionette with loose strings). Take hold of two fingers and pull the arm firmly towards you, lifting it a couple of inches off the floor and see whether it can be swung smoothly and heavily from the socket of the shoulder joint or whether, as often happens, at the beginning of practice she forgets to relax and holds up her own arm. Repeat the same technique by checking movements of the hip, knee and head. Ask the rest of the class to try out these exercises and then to change with their partners.

*Selective relaxation, sometimes called disassociation.* Having talked about contractions in the first stage of labour, remind the class that when the muscles of the uterus contract strongly, many other muscles of the body tend to tighten in sympathy. It is not possible to make the uterus contract to order so that they can practise controlling the rest of their bodies (although they can consciously relax when they notice Braxton-Hicks contractions). So you are going to make use of the muscles of an arm or leg as a 'pretend' contraction. Continue thus:

'Tighten your right arm, breathe in, out and relax everything except your right arm. Partners please check quickly that the legs and other arm have not tightened up to match' (speed is important since the women may get cramp if asked to hold an arm or leg tense for more than a few seconds). 'Let go completely. Repeat with the left arm and alternate legs.'

The control necessary to achieve this type of relaxation is not the same as that used in labour, since contractions of the uterus are involuntary and the limbs are under voluntary control, but the

exercise can give women a useful insight into the amount of concentration that is required, providing the reasons for it are clearly explained. A further and more meaningful progression can be achieved by arranging the women in a semi-upright sitting position, with bent knees and asking them to hold their breaths, tighten their arms and allow their legs to relax and fall outwards without letting the breath go at the same time. This gives practice for pushing in the second stage.

*Relaxation during discomfort.* Ask one woman to place both hands on the inside of her partner's thigh and gradually to increase her pressure until it becomes quite unpleasant. After a few minutes' pause, she repeats this, trying to apply the same amount of pressure, but this time the partner tries to minimise the sensation by deliberately relaxing towards the pressure and concentrating on slow deep breathing.

This simple exercise gives many women confidence that they will be able to raise their pain threshold in labour through concentration. Some teachers such as Kitzinger (1972) like to take this one step further with their pupils. After they have become aware of tension and its release through body memories they attempt to teach them to appreciate tensions arising from emotional memories and to control them. For example:

'Think of yourself in a worrying situation, sitting in the dentist's waiting room, crushed in a crowd, or being squeezed into the pavement by an overtaking lorry. Act out the situation, then stand outside yourself—notice what you are doing, what position your body is in, what muscles are contracted, how you are breathing. Now consciously, deliberately send messages to your joints and muscles to switch off the tension. Relax completely and breathe gently and evenly. Summon up the picture again and this time meet it with relaxation instead of tension.'

### **Breathing in Labour**

It has sometimes been stated that deep breathing is necessary during contractions to maintain oxygenation, but Buxton (1966) has shown that hyperventilation with the resultant dangers of lowering the blood acidity is much more common than hypoventilation. He compared four groups of mothers, one untrained and three who had been taught various kinds of breathing for use during the first stage of labour. Hyperventilation was most marked in the untrained group but occurred also in the groups who had

been taught to breathe very deeply and slowly and those who had learned very shallow rapid breathing. There was much less evidence of overbreathing in the fourth group, where less stress was laid on respiratory movements, and muscular relaxation was very carefully taught.

Various authors have advocated different types of respiration based on the use made of the diaphragm. Heardman used deep, slow breathing in which the diaphragm was encouraged to flatten and the abdominal wall to swell up to relieve pressure on the uterus as it tilted forward during contractions. Lamaze on the other hand, suggested very light shallow respirations in the upper chest to *minimise* movements of the diaphragm and so prevent any extra pressure on the fundus at the height of contractions.

Other teachers believe that respiratory control during the first stage of labour has a largely psychological value. Fairly deep slow breathing aids muscular relaxation and quiet concentration on the inflow and outflow of breath gives the mind a rhythmic focus of activity. We subscribe to this view but have found from experience and observation that somewhat shallower quicker breathing over the height of strong contractions seems to help many women. Whether this is due to the minimisation of diaphragmatic pressure or whether it is simply that a woman finds it helpful to vary her responses to a changing sensation and think of breathing 'over the top of the contraction' we do not know.

When the bearing down reflex is established, the maintenance of breathing control has a definite physiological basis as well as a psychological value, for it is the use of her diaphragm that determines whether a woman pushes well or not.

Breathing should always be as quiet and effortless as possible, and no commands other than to start or stop a particular kind of breathing should be given. Each woman is encouraged to find the speed and depth of breathing which is comfortable for her and then to maintain this when she is practising at home and later in labour. She will not always succeed but this activity in combination with carefully selected drugs does help to control the very rapid or very deep over-exaggerated breathing which one sometimes sees as a panic reaction in labour.

Breathing exercises should always be interspersed with other exercises and related to the type of contraction which they are designed to help. They may be introduced as follows:

*Easy breathing.* 'Whenever you want to relax, take a deep breath in, sigh it out and let go completely, and now breathe just a little bit more slowly and deeply than usual, just enough to make you conscious of your breathing rhythm. Each time you breathe out try to feel a little bit more tension flowing out of your body. You will use this kind of breathing during early contractions.' (When the women have found the depth and speed that seems comfortable, they are each asked to time their respirations for a quarter of a minute; for a woman with a resting respiration of 16 to the minute, this slightly slower, deeper breathing comes out at about 12 to the minute.)

*Lighter breathing.* 'Put your hands on the top of your chests, just below your collar bones, and now breathe rather more lightly and quickly than before, feeling your chest rising and falling gently under your hands; rather like a pigeon ruffling its breast feathers. Don't forget that although you are breathing more gently than before, all the air that goes in must come out. You may prefer to let the air sigh in and out through half opened lips but make sure that you are breathing in your upper chest, not your throat, otherwise you will get a very dry mouth. You will probably find this kind of breathing helps you to cope with the peak of stronger contractions.' (Timing here results in a speed of 24 to 28 breaths per minute for most people, and mothers breathing more quickly than this should be encouraged to slow down and breathe a little more deeply.)

Demonstrate to the class as follows. Ask one woman to lie on her back, with her shoulders comfortably supported by pillows and knees bent. Having told her that you are going to give her a 'pretend' contraction, place your hands on her abdomen and begin a little gentle pressure—she breathes in, out and relaxes, then takes one or two breaths in her deep slow rhythm (in labour the number will depend on the speed with which the contraction builds up). Increase your pressure gradually over the next half minute, asking her to decrease her breathing depth as it becomes more comfortable to do so until she can picture the height of the contraction from your firm pressure and can 'breathe above it' with her shallow breathing. Release your pressure as the contraction dies away and she will hardly need to be reminded to slow and deepen her breathing again and to signal the end of the contraction with a big breath out. The class can then practise on each other.

*Pushing breathing.* 'Put three fingers on the soft spot above your baby and below your breast bone; now cough. Can you feel a ridge of muscle moving under your fingers? Try again, but instead

of coughing, just make the ridge of muscle stand out again and feel that you have a piston' (or the plunger of an icing cylinder or anything similar which the girls will be familiar with) 'across your middle which is moving downwards.' (If anybody has any difficulty the teacher can demonstrate a strong push and let the mother feel the effort in her body, then try to copy this less vigorously.)

'This is your *diaphragm*, it is a big mushroom-shaped muscle which is attached to your ribs all the way round your body; above it are your heart and lungs and below it all the contents of your abdomen and pelvis including your uterus. When you breathe in deeply the centre of your diaphragm goes down as long as you hold your breath and keep your ribs *still*.' (Apart from pushing into the throat, the failure to fix or 'block' the ribs is the commonest reason for ineffective pushing, since movement of the rib cage gives the diaphragm an unstable origin to pull from.) 'In the second stage of labour, if you are asked to push, you wait for a contraction to start, take one or two deep breaths in and out while it builds up, then when you feel your uterus beginning to press down on your baby, you help it by holding your breath, making your diaphragm piston go down and at the same time tucking your head forward on to your chest to tighten your tummy muscles and increase the pressure. When you run out of breath you keep your position, breathe out, in again rather quickly, with head raised a little as if you were taking a quick gulp of air when swimming, and go on pushing steadily with the next breath until the contraction is over. Now rest back and relax completely.'

It is obviously not desirable that the women should strain during class but they do need to do just enough to be familiar with the correct sensations. The teacher can demonstrate either on herself or on members of the group, the different positions that they may be in. She may suggest that a woman should fix her eyes on a coloured tile or other point on the wall of the delivery room which she judges is about level with her vaginal opening and push towards this. Vague suggestions about 'pushing into your bottom' are not very helpful since the trained mother should be very well aware of where she is aiming. Stress should be laid on the necessity for relaxing the legs and pelvic floor and this will require some discussion on the possible sensations and emotions associated with the act of giving birth (see birth and the baby, later in this chapter). Above all, the class need to be made aware of the power of uterine contractions at this time and the pleasure and sense of achievement that many mothers feel when they are working in harmony with them.

*Breathing to prevent pushing.* 'This may be used at the end of the first stage of labour if the cervix is not quite dilated or at the end of the second stage to allow the baby's head to be born slowly and smoothly. If your uterus is telling you to push and you are being asked not to go with it, you must do some sort of fairly deep breathing which will move the diaphragm up and down and stop it from fixing. Try this irregular blowing known as "hoo, hoo, ha" breathing, it goes like this' (demonstrate). 'In, out (hoo), in, out (hoo) and in again and out (ha) puffing the last breath out through the lips rather more slowly. It may help you to concentrate and keep the rhythm if you tap at the same time 1, 2, 3; 1, 2, 3. Alternatively, you can use a series of regular short sharp breaths out. You can use this type of breathing and gain some benefit from inhaling gas and oxygen with the inspirations; it is more tiring but as it is usually used at the time your baby's head is being born, this is a matter of minutes only, so it does not matter. You may be told to "open your mouth and pant like a dog" but do remember to be a large St Bernard on a hot day, not a Pekinese in a hurry, because you *can* do very rapid shallow panting and push at the same time.'

### A LABOUR REHEARSAL

After discussing different aspects of labour and its management, we draw some of the common happenings together and offer the class at least two labour 'rehearsals': one of a straightforward spontaneous labour, the other envisaging some of the variations described in the next chapter (see especially the descriptions of inductions and epidural analgesia). Some teachers find the idea of presenting the women with a series of problems a somewhat macabre exercise, but we are thanked so frequently by past students for having given them opportunities to practise dealing with problems that actually happened to them, that we continue to do so. It certainly gives to the teacher an opportunity to check up on any information that has not been understood or remembered and gives the women possibilities of imagining situations and finding the confidence to cope with them.

When painting a picture of labour, it is useful to 'talk through' a series of contractions at different stages including the mother's activities as well as the progress of the contraction; later, only a description of the contraction is given, leaving her to do what she thinks is appropriate. Diagrams for some of these have been included as a guide to inexperienced teachers who may later adapt them and change the words to fit their own experiences and understanding of their patients' normal life styles. Here is one possible outline:

'You felt very energetic yesterday and turned out several cupboards, took a little while to go to sleep because your back was aching but eventually had a good night's rest. You woke up about 5 a.m. to go to the loo and found a slight blood stain on your nightdress, got very excited about this and poked your husband but all the response you got was a sleepy grunt. You lay still for a bit trying to relax but turning over in your mind all the plans you had made—thinking about your suitcase, the baby clothes, your husband's supper if you had to go to hospital. Eventually having got it all sorted out and as nothing else seemed to be happening you went to sleep and did not wake again until the alarm went off at 7.30. After breakfast you had a couple of very loose motions and your tummy felt a bit uncomfortable, but gradually the discomfort began to come only periodically and you realised that your tummy was hardening each time, so guessed that these must be contractions. You had checked with your hospital during a visit and Sister had given you some instructions. She had probably said that unless your water broke you could stay at home until your contractions were getting stronger and coming fairly regularly at eight to 10-minute intervals. Yours were still only vague and irregular, so you tidied up the flat and did odd jobs. Now maybe it is a couple of hours later and your contractions are getting longer and stronger and closer together. You are more comfortable now if you stay still as one begins, maybe resting back in a firm armchair, maybe standing or leaning forward on to a table or sideboard. Choose your own positions and let's imagine this type of early contraction starting now (Fig. 5).

'Now you decide it's time to go to hospital so your husband rings for the ambulance, you collect your belongings and off you go. You are put into a single room and your husband is asked to wait in the waiting room. You undress and get into bed and one of the midwives asks you to tell her what has been happening to you so far and examines you, maybe just an external check of your baby's position and heart beat, possibly an internal examination. They say you are making good progress and decide to "prep" you in the way we have talked about.

'Now you have been to the loo and have been caught with a contraction in the corridor, what are you going to do about it? That's right, either lean forward against the wall, resting your head against your crossed arms or back against it with your hands in the hollow of your back. Breathe out and relax as the contraction begins, concentrate on your slightly slower, deeper breathing as it rises to its peak and fades, signal its end with a big breath out and continue on your way back to bed.

'You are in bed now, with your husband sitting beside you. He may rub your back in the way we practised at the fathers' class or may try this if you have backache. You remember the pelvic rocking movement we learned in the early classes—it can also be helpful at

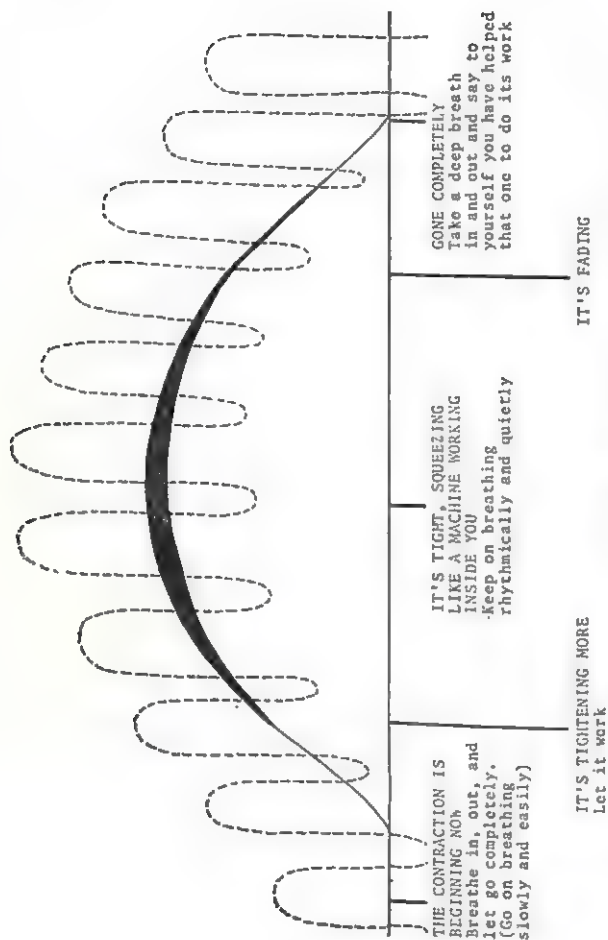


FIG. 5. Talking through a contraction. Early first stage (three-quarters of a minute to one minute). ● contraction; - - - - breathing rhythm.

this time but needs to be done very, very gently. Lie on your side, rock one way as you breathe in and the other way as you breathe out, experiment and see which seems best to you. Now let's use it through a contraction. It's starting now, breathe in, out and relax, in again and rock, when you are ready out again and rock the other way. Keep this up through the contraction and finish as usual with a big breath out. Throughout this stage it is a good idea to vary your position fairly frequently. Try sitting more upright or lying on your side.

'Some time has passed and your contractions are much longer and stronger and closer together. It's harder to relax but you know they are doing their job. Maybe you have changed your position and are now semi-upright with your back well wedged with pillows; you are finding it more helpful now to breathe more lightly over the height of contractions. Imagine a stronger contraction starting now (Fig. 6).

'The midwives have been coming in and out checking on your contractions and on the baby's heart beat. They remind you to empty your bladder every hour. You are making good progress and they ask you if you would like something to take the edge off the contractions. You accept, receive an injection into your thigh and 20 minutes or so later become rather muzzy and drowsy. Perhaps you actually doze off for a bit and wake at the height of a particularly fierce contraction and have a bit of a struggle to get back in control of yourself again—a husband's help is invaluable here. Ask him to remind you to breathe at the speed and depth you have practised. Too quick or too deep breathing may cause tingling of your hands or feet. Should this happen, breathe into your cupped hands for a few seconds.

Now, two hours later, the contractions are coming thick and fast and you have asked if you can have some more pethidine but the answer was no, because "your are nearly fully dilated" so you have been offered gas and oxygen to inhale. You are going to use it through this contraction. Its starting now, press your mask against your face, breathe in, out and relax as usual, now breathe fairly slowly and deeply (more gas goes in if you keep your mouth open and you will hear it bubbling through the tube—shallow breathing isn't any good into a mask). Contraction is ending, big breath out and take the mask off (Fig. 7).

'Alternatively you may prefer to manage without the mask and be much encouraged when you feel as if you want to have your bowels opened during one contraction, then find yourself catching and holding your breath at the height of the next. What do you do? That's right, blow out then "hoo, hoo, ha" or pant through the rest of the contraction and if you are alone, you ring your bell and ask a midwife to come and look at you. Perhaps they will say you are ready to push or perhaps you will have a sticky half hour in which you are being told not to push and you cope by fixing your eyes on

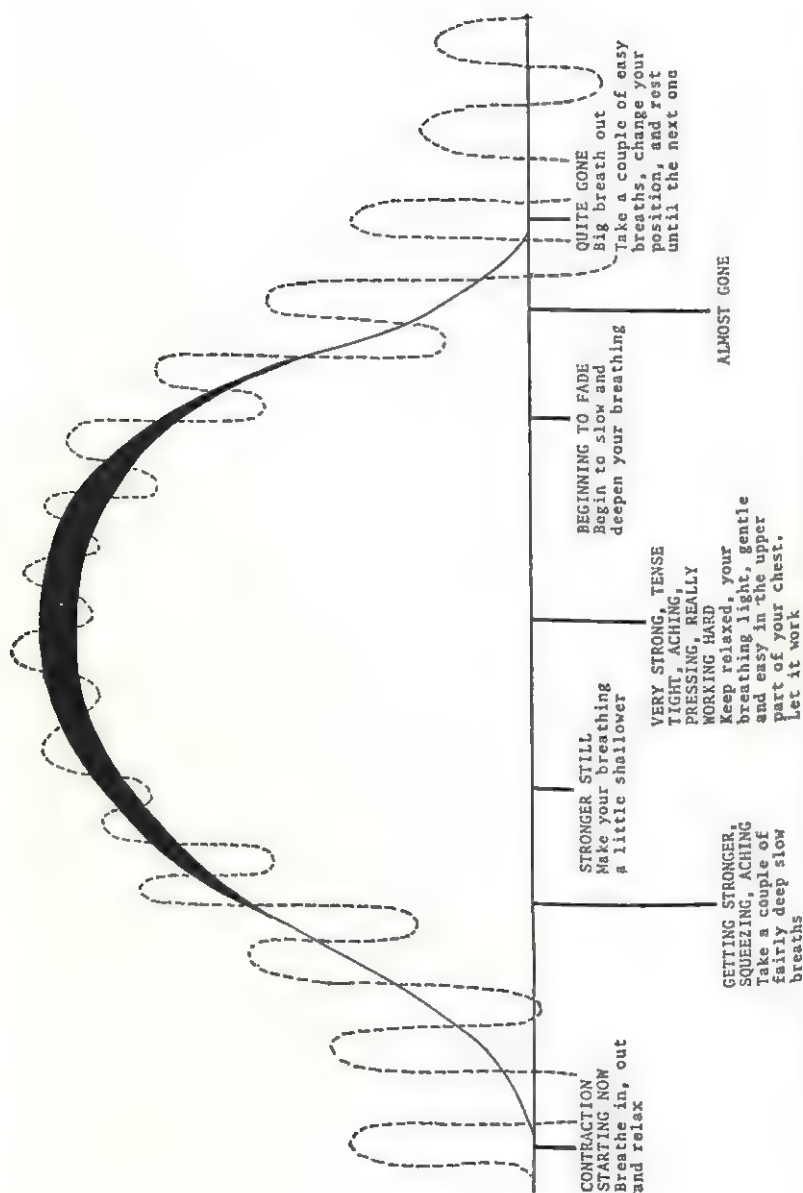


FIG. 6. Talking through a contraction. Late first stage (one minute to a maximum one and a half minutes).

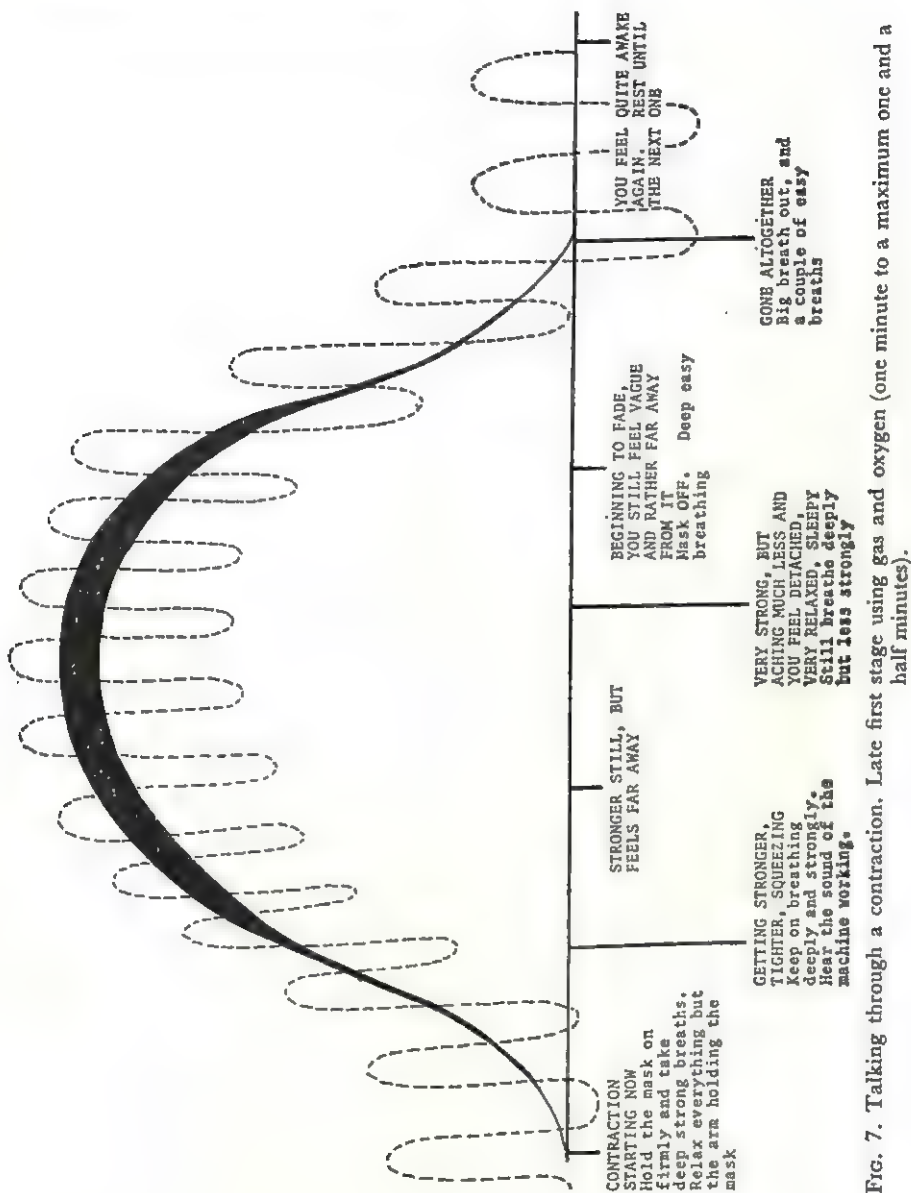


FIG. 7. Talking through a contraction. Late first stage using gas and oxygen (one minute to a maximum one and a half minutes).

your husband's face, hoo, hoo, ha breathing and tapping the rhythm against your thigh (Fig. 8).

'Your cervix is fully dilated now, and if not already in the delivery room, between contractions you will roll off your bed on to a stretcher and go along there. Here you are on a rather hard couch with a big light above you, surrounded by figures in masks and gowns; one of the midwives whom you can only recognise by her eyes, makes you comfortable, puts her hand on your tummy, says there is a contraction coming and you can try a little push this time. Everything you have heard about pushing goes straight out of your head but she reminds you (Fig. 9).

'The first few pushes don't go too well, then you get the hang of it. Perhaps your husband or the midwife can help by supporting your shoulders. Don't forget to relax completely in between pushes. Some women become very chatty at this time and will have a long conversation about whether they want a girl or boy or what they are going to call it, others just flop out and apparently go to sleep. You are beginning to feel tired, then suddenly revive when somebody says they can see your baby's head.

'You may now feel that the stretching sensation when pushing is distinctly uncomfortable. Some people do, and some actually say it feels extremely enjoyable. Remember that no two labours are alike, and even if you have six you'll find many differences. If you have had a local anaesthetic at this point the stretching feeling will be considerably diminished. If it's your second or third baby the stretching has already been done once and can be done easily and quickly again. Perhaps you might be just a bit apprehensive and think that it could be going to hurt soon. This will stop you relaxing the perineum fully and making the most of the contraction. It often helps to take two or three good breaths of the gas and oxygen, if you feel like this, at the very beginning of a contraction, then drop the mask and go into the pushing routine. This bit of extra help gives confidence to let you work well with your body.

'Now the baby is about to be born. The midwife asks you to do exactly as she says. Let's practise this contraction (Fig. 10).

'The vagina feels quite tense as the head slips out, even though you are consciously relaxing the whole perineum and your legs as you have practised. When asked to pant, remember that your mouth should fall slackly open. Some people, again in case it might hurt, like to have the gas and oxygen mask to pant into for these seconds. We could practise that too, relaxing the body except the one hand which holds the mask. You might not want to use it at all, and certainly very few people having second babies do, but just like to keep it by your hand in case you do.

'There is a sudden relief of pressure and gently the shoulders and the rest of the body are slipping out. Look at your baby—he will probably look beautiful to you even though he is bluish, wet and sticky, perhaps a little bit bloody, and has a head shaped rather like an acorn.

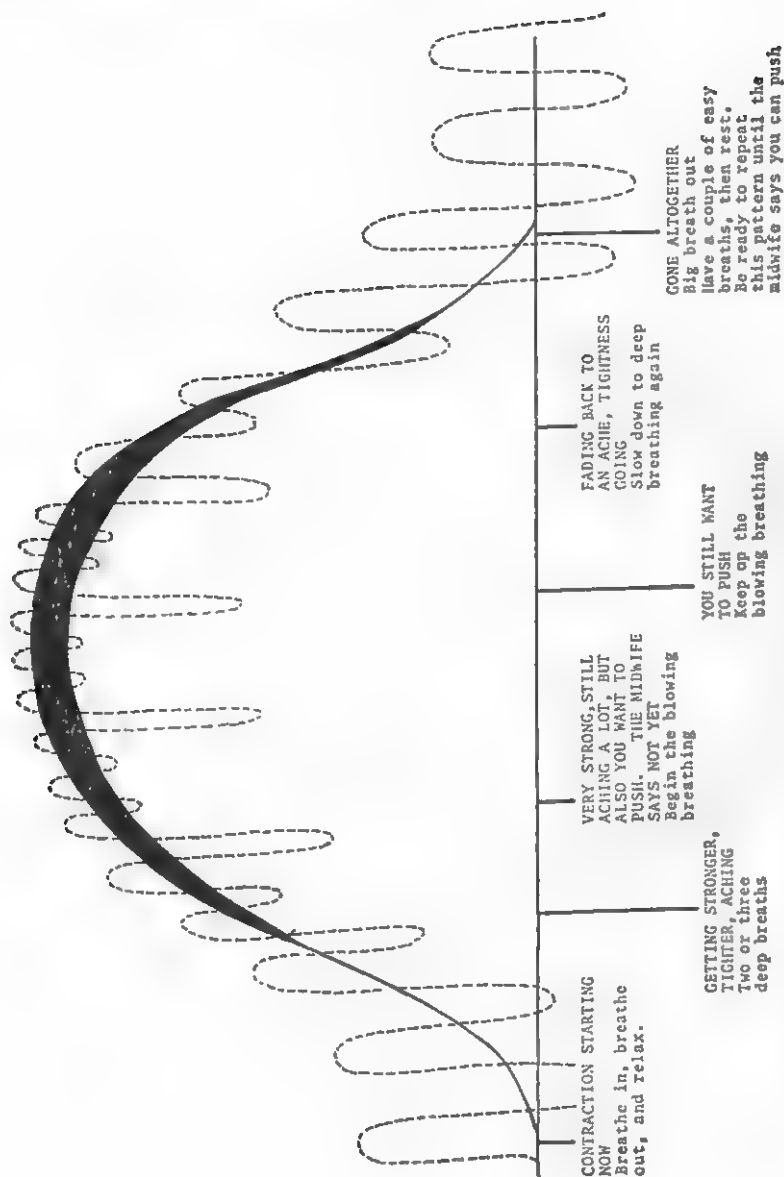


FIG. 8. Talking through a contraction. Transition stage (one minute to one and a quarter minutes).

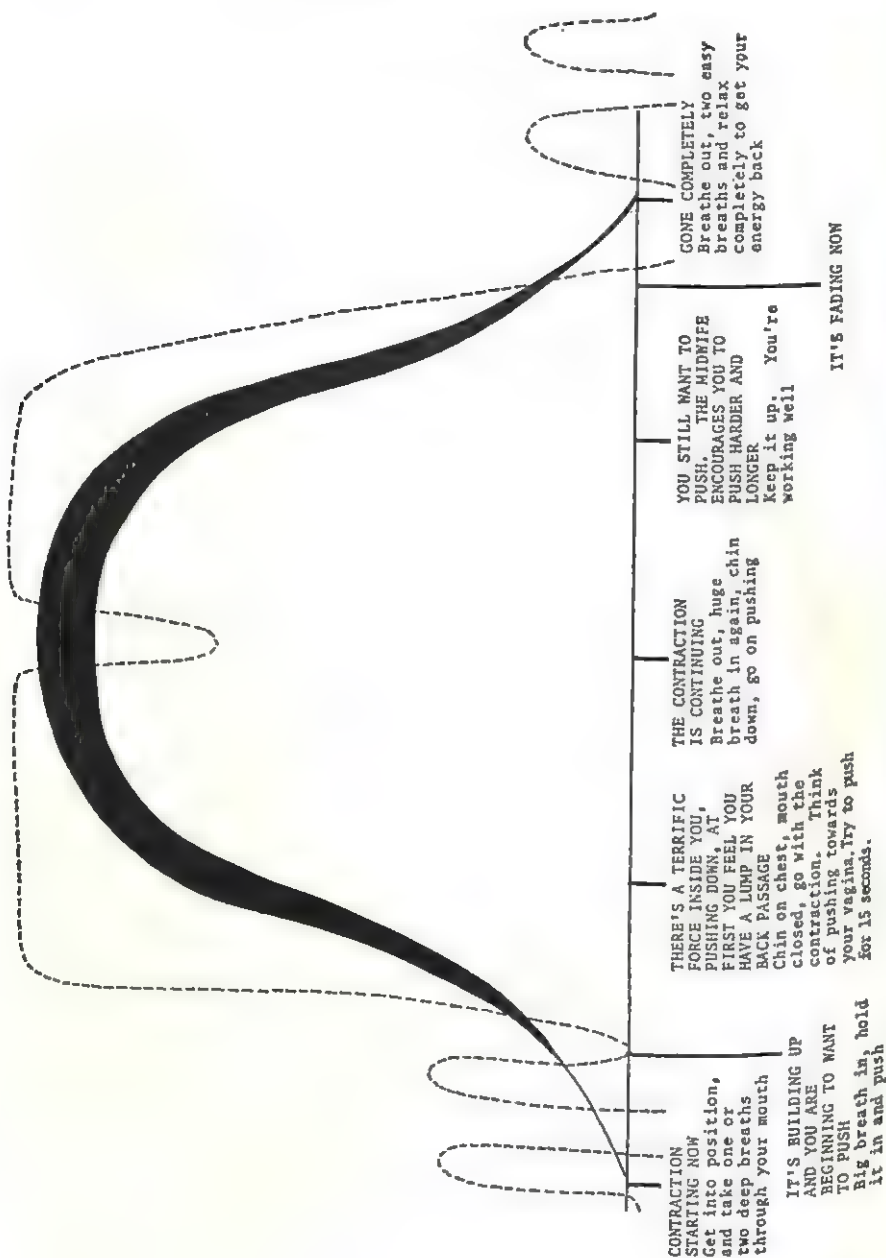


FIG. 9. Talking through a contraction. Second stage (approximately one minute).

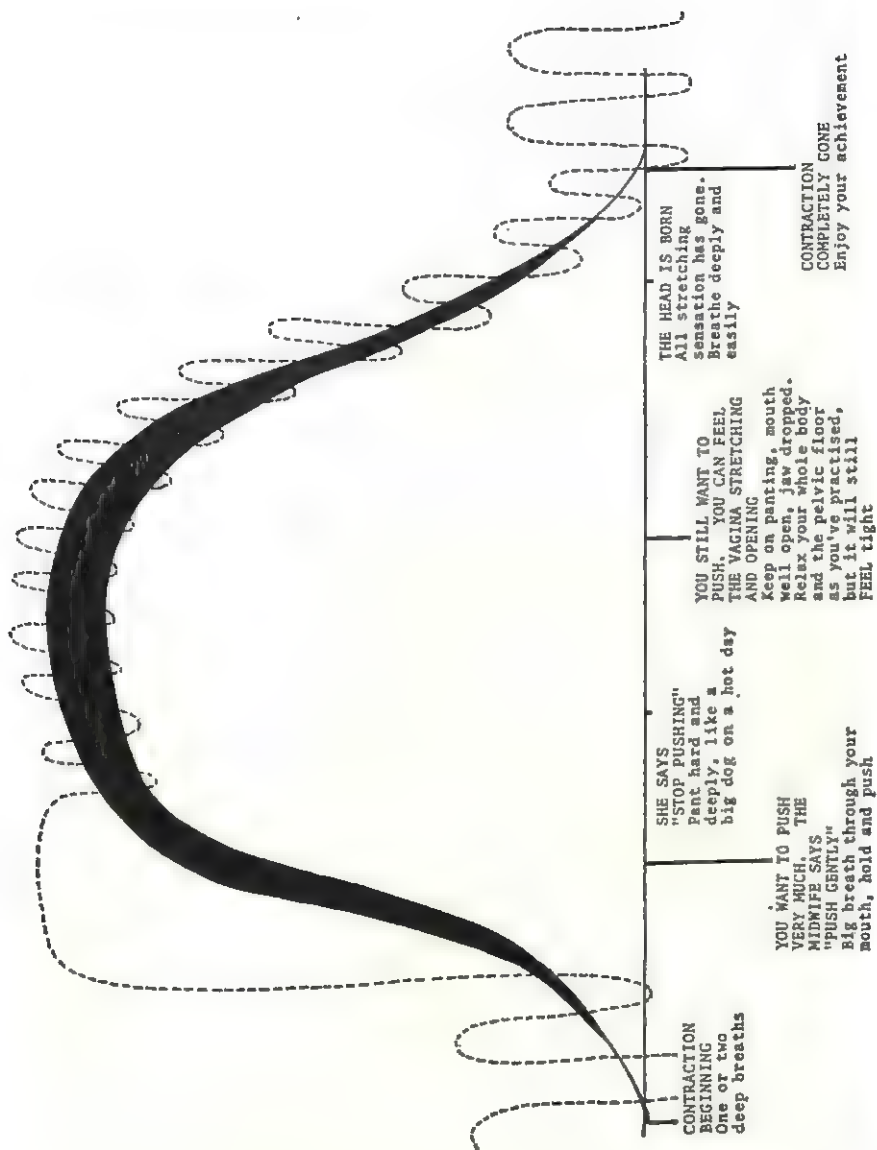


Fig. 10. Talking through a contraction. The birth of the head (approximately one minute). *Listen to the midwife.*

'Your work is over, and you can rest with legs apart while one midwife takes care of the third stage, and another the baby. The placenta has arrived, you have a pad on, you are covered up and holding your baby, who by now has probably stopped crying and is lying peacefully.

'We can't try to tell you how you will feel at this minute. Most women say it is an indescribable feeling in any case. You will have to wait and see. You may feel tired and pleasantly happy, or exhilarated, you may feel instantly maternal, emotional and protective, or may at first view the baby with considerable detachment and be surprised that you should feel like this. Some mothers instantly feel overwhelming love, in others it has to grow over days or weeks. Accept your own feelings, hold the baby closely, and don't forget to let your husband have his share of holding him too.

'If you want to breast-feed, and your baby seems to be trying to suck, you might like to ask the midwife if you can put him to your breast for a minute or two. Many experts believe, as with most animals, a baby's sucking reflex is at its strongest just after birth if he is not too tired.'

### DEMONSTRATING THE DICKINSON BELSKIE BIRTH ATLAS

This, like the Cow and Gate Mothercraft Charts, is designed so that it stands firmly without support, and the black-and-white photographs of the models are clearly and easily seen by a group of up to 15 people.

One could stand behind each picture and read the very good explanation of each model to the class. This, however, besides being dull and boring, would obscure the teacher, prevent her from observing class reaction, and hinder her from pointing to details. We normally sit on the floor by the side of the Atlas, with the class on mattresses or chairs as they please. A teacher on the same level, or lower, than her class has less of the didactic 'schoolmarm' image and this leads to a more relaxed group.

The explanations to each picture should, of course, be well learnt, then one's own words give spontaneity.

Here are a few points, put simply, that we have found worth mentioning:

*Plate 1. Pelvis and uterus.* Picture of pelvis demonstrated with, if possible, a model pelvis against teacher's body. The opening in the basin of the pelvic floor is described with its sling of muscles, and the model pelvis used to describe 'head engaged' and 'head fixed' etc. 'The growth of the uterus has taken place with no pain, even

though everything else has got a bit squashed. In labour there is little pain from a uterine contraction itself; most of the pain or discomfort during the contraction is because the baby is being pressed on the muscles round the uterus as it comes lower with each contraction.'

*Plate 2. Female pelvic organs.* One must emphasise that the woman is on her back—'legs here, tummy and breasts along here, and this the curve of the tail of the spine'. Always, at first, a simple word followed by the correct term—back passage or rectum, womb or uterus, front passage or urethra. 'It is obvious that all these organs have lots of room, but we shall see how everything becomes rather squashed by the womb later.'

*Plate 3. Insemination, ovulation and meeting of sperm and ovum.* 'This is vastly enlarged. The egg or ovum is as small as the head of a pin, so you can imagine how small the sperm are—but they are very much alive, and hundreds of them reach the egg, even though only one sperm enters. The bottom picture shows the fertilised egg becoming a cluster of cells within three days.'

*Plate 4. Early weeks of development.* (1) This is the day that your period should start, and here's an enlarged picture of the little ball of cells which is now firmly fixed to the wall of the womb. (2) Here you are two weeks overdue. This eight-times enlarged picture is beginning to look a little like a baby. (3) Three weeks overdue. Arms and legs growing and he has blue eyes. (4) Two and a half months pregnant. A real little baby, his heart is beating, fingers and toes forming, and he's almost filling the womb. The afterbirth or placenta is growing bigger and feeding the baby through the cord. He's moving a little, but not enough for you to feel him. (5) Three and a half months pregnant. He's got everything but fingernails, toenails and hair, and he's moving much more.' With the last two pictures it is very common for an argument to start in the class about the ethics of abortion—many women do not picture such a 'real' baby when abortion is discussed casually.

*Plate 5. Four and a half months.* The model pelvis is useful again here, against the teacher's body, to get the right perspective. 'At four and a half months pregnant he's kicking regularly and turning and somersaults sometimes. He can get the cord twisted round him during these "looping the loop" sessions, but this isn't important—if it's round his neck at birth the midwife either clamps it with forceps, then cuts it and unwinds it, or just loops it over his head.' Usually somebody in class says that parents, grandparents, etc. have warned about any pregnant woman putting her arms above her head—'the cord goes round the baby's neck'—so this old wives' tale can be refuted.

*Plate 6. The function of the placenta.* 'Just as a plant is fed from its roots, through the stem to the leaves, you can see the afterbirth as the roots, the umbilical cord as the stem, and the growing baby being fed.' Here is an opportunity to mention diet and regular

elimination, and also that the mother's and baby's blood does not actually mix, the placenta acting as a complicated sieve. It is as well to be aware of what the placenta *does* pass to and from the baby, in case one is asked if a baby can get chickenpox (it can) or tuberculosis (it cannot) or to explain the Rhesus factor.

*Plate 7. The baby at seven months.* This is a delightful model which the mothers relate to as their babies are about this stage (seven months plus) and they want to know details of weight, length, possibility of survival.

*Plate 8. Before labour begins.* Nine months, ready for labour. 'The baby is lying sideways. As labour goes on he will turn until his head faces to the back—if you look down to watch him being born you will usually just see the back of his head. Note how closely the baby will be pressing on the bladder—this must be kept as empty as possible. He'll have to squash the rectum a bit too and that's why you'll have a small enema, just to have that part of the back passage empty to give him more space. Notice how thick the neck of the womb or cervix is.' Pull up the page to show the cervix in the next picture and compare the two. 'If you've been in labour at home for quite a while, and when examined in hospital the midwife says the cervix is only one finger dilated, ask her if it's thin, and then think what a lot of work has already been done.' The dilatation of the cervix can be demonstrated by one of the models described in Chapter 3, or by the hands, using words which the midwife will use. One must therefore find out whether she will talk of 'fingers dilated' or centimetres, and the class must be reassured that if she says 'four fingers dilated' she is only using two fingers and seeing how far she can open them.

*Plate 9. Labour—cervix dilating.* 'Notice how uncomfortable you would be with a full bladder now, and it would also make labour slower because the head would have less room. The baby has gone deeper into the pelvis and is beginning to turn. He doesn't help himself at all—he's pushed round by the contractions.'

*Plate 9A. Labour—first stage.* 'The cervix is half dilated. The bladder and back passage are both being flattened, especially during a contraction. In this case the waters haven't broken—you can see the membrane in front of the baby's head.'

*Plate 10. Labour—second stage.* 'The last bit of the cervix has opened and the womb and vagina make a continuous passage. The vagina stretches out just like one of those old-fashioned tightly pleated skirts, and goes back again to almost its normal size as soon as the baby is born. The membranes still haven't broken. At this point the midwife or doctor would break them (they may do this earlier) simply by a vaginal examination and pressing the bag during a contraction, when the bag bulges by the pressure of the shortening womb. The water flows out and feels warm. The baby's head is now changing shape. The bones are so soft they can do this easily, and there are even some points in the head, round the two

soft spots, where the bones can overlap. The head's diameter is less than 10 cm. or 4 in. as it is being born—long and thin—but it gets back to normal in a very short time.' The class is often interested to be told that an experienced midwife can easily walk along a line of cots containing new babies and say 'that was a caesarian section' because of his round head.

*Plate 11. Labour—'crowning' of baby's head.* 'The baby's head is almost completely turned to the back. The midwives can see part of it and are getting very excited as they encourage your pushing efforts. Just when you feel you could really push your hardest they will suddenly say, "Stop pushing and pant!"'

*Plate 12. Labour—second stage nearly completed.* 'You are relaxing and panting, and the baby's head is coming out slowly, so that any tear you have can be as small as possible. The midwife's hands aren't shown, but she is guiding the head out.'

*Plate 13. Birth.* 'The top shoulder is born first and to manage this the baby is pushed by the next contraction into a sideways position again. The midwife waits for the head to turn (if it didn't the baby wouldn't be comfortable) and when it turns she knows the shoulder is ready to be born. She presses the head down a little, the top shoulder comes out, and the whole baby slides out smoothly, feeling warm and wet. He will be blue or mottled or bruised looking at first, but will get pink as he begins to cry. He may have a little blood on him, and almost always some grease as if he'd been coated with lard or Nivea cream. You will still think he looks beautiful!'

*Plate 14. Third stage.* 'The biggest contraction, but you don't feel it because there's no baby left inside to press on your surrounding muscles. The womb squashes down hard, the placenta can't change its shape so is pushed off the wall of the womb. The midwife helps it out by pulling the cord gently. Immediately the womb which had filled this whole page is as small as this. The midwife can feel it by pressing your abdomen—it feels like a cricket ball.'

*Plate 15. Involution.* (1) 'Five days after the birth—uterus still a little large. (2) Fourteen days afterwards—it has disappeared behind the pubic bone (demonstrate on self) and everything is more or less back to normal. Pelvic floor exercises *must* be kept up at home so that the muscles which have become stretched become strong again.'

*Plate 16. Newborn baby.* Describe the umbilical cord and what happens to it. Describe the dryness and sometimes cracking of the skin of the feet and hands, especially if the baby is overdue. It is possible that the regular movement of the baby's feet and hands inside the uterus rub off the protective grease and so the dryness occurs.

*Plate 17. Twins.* We tend to miss this out unless someone in the class is suspected of carrying twins, then we explain about the two layers of membrane and how identical twins share the outer layer

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## CHAPTER 7

# Variations of Labour Patterns

Some antenatal teachers with whom we have discussed the content of classes are strongly of the opinion that only 'normal' labour should be mentioned, as they feel it is creating fear and alarm to give details of abnormal labour patterns or obstetric procedures.

If, however, the three-part talk, practice, group discussion plan is followed, it is impossible, even if advisable which we do not believe, to avoid being asked questions of all kinds, many of which will refer to labour variations. We believe that these can and should be discussed, giving absolutely true and real explanations, but remembering that each woman will picture herself in the situation we are describing. Words should be chosen which are simple and undramatic, so as to leave an image which is neither frightening nor worrying. Long and technical descriptions should be avoided as they may not be properly understood.

In syllabus examples it will be seen that variations are planned to be discussed in one of the later classes. We have found, in fact, that most of the content of this talk will have been asked spontaneously in previous classes—and asked at a time when the questioner was really wanting to know, perhaps because of interest, but maybe because of sudden fear, and an explanation at that point is far more valid and remembered. This means that a teacher must be aware of points already covered in class, and a useful way of remembering is to make brief notes at the end of each session on questions answered. Indeed, this is essential if a teacher has several groups each week, at different points of the syllabus.

The talk on variations, therefore, is simply a reminder of explanations previously given, answering any questions which arise from this, and the addition of any topics which have not been asked in class.

The following topics should be covered at some stage during the course:

Inductions

A very short labour

A very long labour

Precipitate labour—what to do at home  
Cessation or slowing of uterine contractions  
Posterior positions  
Breech positions  
Epidural analgesia  
Fetal heart monitoring  
Fetal blood sampling  
Episiotomy, pudendal nerve block, local anaesthesia  
Forceps delivery  
Ventouse vacuum extraction  
Caesarian section  
Twins  
Retained placenta  
DOMINO Scheme

In discussing these topics there are certain questions which frequently recur. Basically, whatever is to happen, a woman wishes to know:

Why is it happening?

With an obstetric procedure, how is it done?

What will it feel like? How can I help myself?

What good or harm will come to me or my child?

Even if a teacher does not wish to discuss any of the above topics as a routine in her class schedule it is wise to familiarise herself with all the subjects mentioned, and decide how she would reply to any question. She can, of course, admit that she does not know the answer, but if she promises to find out she must not fail to do so, or she loses the confidence of her class. (Again, a notebook is useful.)

### USEFUL EXPLANATIONS

The following are brief notes on simple answers for teachers to consider when planning their own individual style of explanation.

We are starting with the two most common variations, the first of which may be performed on many members of the class, and the second of which is becoming increasingly widely used: episiotomy and inductions.

#### **Episiotomy**

‘This is the most common obstetric procedure, which several members of the class might experience. When you visit the hospital

to look round you can ask how many people have this done. You will probably find the number is at least 70 per cent of women who have had their first baby, less with subsequent babies. It is a small cut made in the skin and muscle between the vagina and the anus. We already have learned that this is called the perineum. The cut is occasionally straight down, but more probably slightly to the side, at about a seven o'clock angle. It is always done under a local anaesthetic unless an epidural is still having full effect. The local anaesthetic could be what is called a nerve block, when a large area all round the vagina is anaesthetised, needing several injections, or one injection to numb the site of the cut, or even an anaesthetic spray. In any case, the cut should be painless. It is always performed if the midwives or doctor, who are watching the stretching of the perineum carefully, feel that it won't stretch enough but will tear. The disadvantage is, of course, that one has to put up with having stitches. The great advantage is that a straight cut is much easier to stitch than a jagged tear.

'Incidentally, stitching takes quite a long time, perhaps 20 minutes or more, because the doctor makes small, neat embroidery stitches, almost all of which will dissolve out and not need removal. This makes the perineum and vagina almost as good as new and makes it possible to have the next baby perhaps without a tear at all. The stitching should be almost painless, if not tell the doctor and he will put in more local anaesthetic. Women react differently during stitching—the baby is born and safe and they feel wonderful, but some will rest quietly while others will hold an animated conversation with the doctor while he stitches.

## Induction

*Why?* It is usually because the baby is overdue and you are sure that your dates are correct. If in doubt, ultrasound can be used to estimate the baby's size. Sometimes it is because the baby is large, and sometimes because pre-eclampsia is developing.' The class may need to be reminded of the signs of pre-eclampsia.

*How is it done?* 'You will be admitted into hospital one afternoon for induction the next day. After a very early breakfast or just a cup of tea, a sedative injection is given sometime in the morning, and you will go to the labour ward. The injection gives a peaceful and relaxed feeling. On the labour ward bed, slings will be used to arrange your legs in an open position.' If a teacher feels she has the confidence to demonstrate the lithotomy position herself, she should do so, explaining that the legs can feel quite comfortable as they are well supported. She can discuss embarrassment and suggest that the whole thing is routine to the doctors and nurses, and that the class should try to think themselves into this attitude, too, and accept with relaxation.

'As there is often a few minutes in this position, and you will be going to have a vaginal examination, practise vaginal tightening

and releasing, so that the vagina can be relaxed when the doctor is ready. He will put a small instrument into the vagina and gently up through the cervix, usually telling you what he is doing. Then with pressure he breaks the waters (this is also called rupturing the membranes, or a surgical induction). If the vagina is relaxed and you concentrate on gentle upper-chest breathing, it should feel just like pressure, and not painful. The water, or liquor, will feel warm as it flows out.

‘Sometimes a drip will be set up at the same time, or there may be an hour or so’s waiting to see if labour begins. You have all seen pictures on television of the drip stand with the bottle upside down and a tube running to a vein in the arm. A small needle is inserted, usually in a vein at the wrist, and the tube attached to it. Apart from the prick when the needle goes in the drip should be painless, and the needle is covered with a piece of plaster or a bandage so you don’t have to look at it. The liquid in the bottle is a mixture of sterile water, glucose and a special hormone. This hormone builds up normally in the last weeks of pregnancy and is one of the triggers of labour. By putting extra hormone into the body, contractions usually start quickly, fairly close together, and build up rapidly in length and strength. The drip alone may be used if the membranes rupture spontaneously and contractions do not begin. A less usual way of giving the hormone is in tablet form. It will be destroyed by the stomach acids if swallowed, so you will be asked to place it at the side of your mouth between your cheek and upper gums. Here it is slowly absorbed by glands. Half a tablet is given first, then in half-hour intervals, a whole tablet, sometimes increasing to two to three tablets, still with half-hour spaces. When labour begins the tablets have to be kept in the mouth until the contractions are strong and regular.

‘As the “drip” works quicker, it is usually the favoured method. However, labour can be very speedy once started in this way, and some obstetricians and anaesthetists offer a “package deal” of the drip followed by epidural analgesia when the contractions become strong, as strong lengthy contractions coming suddenly can be difficult to tolerate without this help’.

*What good or harm can it do?* ‘A quicker labour is often thought to be better for both mother and baby. It is much better than allowing you to be very overdue or pre-eclampsia to develop—in fact, it helps to ensure a healthier baby. A minor disadvantage, from the mother’s point of view, is that you will have to stay in bed for the whole of your labour, and any movements in bed will be somewhat restricted.’

### **A Very Short Labour**

*Why is it happening?* ‘Nobody really knows why some women have speedy labours. It seems sometimes to follow a mother-daughter pattern, and certainly a woman who has had one fast labour should

prepare herself for it to happen the next time. A long first labour does not mean a repeat of this the second time however.'

*What will it feel like?* 'The contractions will start with short intervals, which rapidly get shorter still and the contractions longer. Great concentration is needed to keep up the relaxing and breathing techniques, and pain relief should be accepted early, as the labour seems to be too fast to catch the contractions and deal with them properly.'

'Usually, in a fast labour, the baby is in a beautiful position for birth, and suffers no harm from his speedy entry into the world. Unless you have great control at delivery you will usually have to have stitches due to the speed of the birth itself.'

### **A Very Long Labour**

'Again, usually the cause is not definite, but it can happen because the baby is not in a perfect position, and the contractions have to turn him into the correct position for birth. The contractions themselves may be weak, short and far apart. A full bladder or a full rectum can both lengthen labour because the baby's head hasn't enough space to curve round the birth canal.'

*How does it feel?* 'It feels boring, tedious and very tiring. Concentration on breathing and relaxation techniques become difficult because of tiredness, and again some analgesia should be accepted gladly, this time for a rest. As most hospitals don't allow food when labour is well established, hunger adds to the tiredness. Sometimes a glucose drip is put up to give energy. In the second stage you may have become too tired to push effectively and forceps may be used for the delivery.'

### **Precipitate Labour**

'Again, nobody knows why this happens. It has been suggested that a woman may have such a high pain threshold that she just doesn't notice labour until second stage. Needless to say, this is very, very rare. Women to whom this has happened say that, after a few abdominal cramps, they feel like having their bowels opened, then realise they are in labour as the feeling comes in waves.'

*How to help oneself.* 'Send somebody—anybody—for an ambulance or the doctor if he's near. Keep somebody at home. Lie down—if on the bed, on old sheeting or newspaper if some is handy. Whenever a contraction comes, pant like a dog on a hot day—hard. Probably help will arrive. If it doesn't, keep panting as the head is born, being assured that a quick delivery like this is going to be normal. With the next contraction give a little push, and the whole baby will be born. Ask whoever is with you to hold the baby upside down and wipe his mouth out thoroughly with a clean handkerchief. If he is not yelling, tickle his back. When he is crying well, hold him in your arms (the cord will stretch to allow this) and have

your helper wrap you and the baby up warmly. Wait for help. If the afterbirth or placenta comes out, just leave it. These quick labours only happen once in a million or so births and even then usually with a mother who has had several children and "knows the ropes" anyway.'

*What harm can come to mother or child?* 'The mother may have to have stitches. The baby is not harmed at all, so long as his mouth can be cleaned properly so that he can cry, and then he is kept warm.'

At the Third International Congress of Psychosomatic Medicine in Obstetrics and Gynaecology in London in 1971 a paper was given by Dr J. S. Sambhi about Malaysian women who have this type of labour. He called them 'Short and Sweet Labours'.

### **Cessation or Slowing of Contractions**

I have just referred to the 1971 Congress. In the same Congress a paper was given on the effect of handling mice once labour had been established, and of moving them from place to place in labour. On all occasions labour was interrupted, the contractions ceasing for some time. Professor Niles Newton, of the Department of Psychiatry, Northwestern University Medical School, who gave the paper, equated this with the interruption of contractions which often happens when a woman moves from home to hospital.

'Sometimes you get ready to go to hospital with contractions strong and regular, yet while travelling there they stop. This may be a false alarm, but more often they stop until the strangeness of the hospital wears off, and you begin to feel at home, they then begin again and are soon as regular as they were before. If this happens to you, don't worry. Be thankful that you can have your enema and bath in peace. Accept your pattern.'

'Sometimes the contractions become weaker and the intervals between them longer, when you have been in good labour for a considerable time. The cause *may* be a full bladder, or the position of the baby, but is more likely to be tiredness. A strong sedative may be given to allow restful sleep, and labour will then carry on when you are refreshed, or the uterus may be stimulated by putting up a drip. The only frustration of the sedative is having to accept everything slowing down. The drip, however, may produce sudden rapid contractions. In any case, try to accept that this is the way your labour is going, remembering that everyone is different.'

### **Fetal Reactions to Labour**

*Fetal heart monitoring.* 'Occasionally, a sensitive machine is used to

record the baby's heartbeat. A small circular disc is placed on your abdomen, and the machine then records a pattern on paper of the baby's heartrate.

'It can be used in a long labour, during an induced labour, or when you are resting and the nurses do not wish to disturb you by finding the heartbeat regularly with their stethoscopes. It will usually be used if you have epidural analgesia, sometimes combined with a machine which records contractions, as it is difficult with epidurals to tell how often the contractions are occurring and their length and strength. These machines can be worn without discomfort, though their use restricts much changing of position in bed.

'Continuous recording of the heartbeat would also be used if there was any suspicion that the baby was tiring, when the variations in the beat could tell the state of the baby at any time, and whether perhaps a caesarian section should be performed to prevent overtiredness, or a forceps delivery performed as soon as the second stage is reached.'

*Fetal blood sampling.* Very occasionally a small amount of blood may be removed from the baby's scalp. This assesses the acid/base balance and glucose level of its blood and the doctor can estimate how fit or tired the baby is.

### Posterior Positions

A suitable floppy doll should be used to show, against the teachers' own body, the different anterior and posterior positions. The turning of the head to achieve the occipito-frontal position for birth then makes it obvious that a baby lying anteriorly will have to turn little, while a baby lying posteriorly has to make a turn of almost half a circle, and flex his head much more in doing so.

As the baby is turned, something like this can be said:

'You can see it's going to take the baby a bit longer to make the bigger movements. This isn't up to the baby at all—the contractions push him round, and he can help no more than a passenger on a train can make it go faster. So labour may be longer, but with effective contractions this isn't always so. There may be a lot of backache with each contraction. Someone should know how to do back massage effectively to ease this ache, or epidural analgesia may be advised. Occasionally the baby doesn't turn completely. In this case you wouldn't feel much like pushing in second stage, and the pushing would be ineffective as the head would be in the wrong position to come through the vagina. The doctor will turn the head to the right position and with his help you can push it out. 'Sometimes, if you have a nice roomy pelvis, or one which is wider towards the back, the head can turn towards the back and be born' (demonstrate). 'Instead of a glimpse of the back of his

head at birth, his face will be in front. This is called a face-to-pubes delivery' (point to the position of the pubic bone).

### **Breech Positions**

The doll is again used to show the different positions arms and legs can achieve in a breech birth.

'Many hospitals insist that if you have a breech delivery you spend most of your labour in bed. This is to try to prevent the waters from breaking early. Labour proceeds normally, but the aching and pressure with contractions may be less, as the buttocks are softer than the head. Once the waters break (membranes rupture) you very soon feel like pushing, because the soft body or a leg of the baby can easily begin to come through a cervix which has only partially opened. You will be told not to push until the cervix becomes fully dilated, and it is often difficult to stop. For this reason many doctors recommend epidural analgesia for all breech births.

'When pushing begins the baby's legs and buttocks are soon born (a bonus—the sex is identified!). You keep on pushing until the shoulders are born, then the doctor takes over and delivers the head slowly and carefully by forceps. He doesn't want the head to be born too quickly. You remember how a baby's head changes shape as it is born, and a head-first baby does this slowly, so he gives the head a little time to change shape, so that the baby doesn't have a severe headache after he is born.

'In most cases, when the birth is not completely straightforward, the baby is nursed in a special-care nursery for up to 48 hours. This depends on the tiredness of the baby and also on the routine of the hospital. Some hospitals will keep every baby in this nursery after a forceps delivery even if obviously not tired.

'The snags are the difficulty in stopping pushing until full dilatation of the cervix, the use of forceps which usually means more stitches, and the frustration of seeing the other mothers with their babies beside them shortly after birth. The delivery itself should not be painful: if you have been given epidural analgesia there will be no pain; if not, you will either have local anaesthesia all round the vagina or a brief complete anaesthesia for the forceps delivery.

'If you have already given birth to a child you could, probably, with your stretchable vagina, push the head out without the use of forceps.'

### **A Forceps Delivery**

'We have already discussed several reasons for a forceps delivery—a breech birth, a long labour, a tired baby and a posterior position where the baby hasn't quite turned properly. Another reason is that the second stage, even with the baby in a perfect position, is taking too long. Most obstetricians don't like you to have the effort of

pushing for longer than an hour, and prefer to lift it out.'

*How is it done?* (Differences between hospitals must be known.) 'Sometimes a light general anaesthetic is given by an injection in the arm, and you wake to find the forceps delivery completed and the baby giving his first cry. Sometimes the obstetrician gives the nerve-blocking local anaesthetic. Although several injections are needed for this, usually only the first one is felt. He waits a little until the perineum and vagina are numb, then slips the forceps round the baby's head and locks them so that they fit round the head smoothly. They are like two hands' (someone holds the doll upside down and the teacher slides her hands up and round its head) 'and are placed round the head like this. It's easy to see now how the head can be turned to a good position. Often with the next contraction you feel a terrific urge to push and are told to go ahead. As you push, the doctor guides the baby's head out.'

*What will it feel like?* 'With a general anaesthetic—nothing. And the anaesthetic is so light that one doesn't feel sick afterwards. With a local anaesthetic—a dull feeling of pulling.' This can be discussed, especially if someone in class has already had the experience and can describe it.

*What good or harm will it do to me or my baby?* 'To get a tired baby out before he gets more tired can do nothing but good; he will revive quicker and be healthier. He may have small red pressure marks on his head, but these will quickly disappear. He may be placed in the special-care nursery at first.'

'From the mother's point of view, as a forceps delivery is quicker than a normal second stage and as the forceps stretch the vagina more, there is always an episiotomy, almost certainly more stitches than with a normal delivery, and sometimes some bruising. This always seems more painful on the second and third days after delivery, and the stitches pull whenever one moves quickly. The nurses will advise lots of baths, sometimes with salt in the water, which, surprisingly, are enormously soothing'.

### **Epidural Analgesia**

'This is becoming very common in hospitals today, as many more anaesthetists have been trained in the technique. It is used to relieve pain and prevent exhaustion, especially in a long labour. These days, however, it is often used simply because you wish to have it.'

*How is it done?* 'You are usually asked to curl on your left side with knees to chin, or may possibly be sitting bent forward. In both cases it is important to keep absolutely still.' Demonstrate; afterwards the class can practise. 'A local anaesthetic is given, then a needle is carefully put in between two of the bones of the spine, here' point to spot on your own spine 'and a tiny tube is put through the needle and left in. If you get a contraction while this is being done the anaesthetist will stop and wait, so that you can keep completely still while he does it. The needle is taken out, up

the tube, and the end of the tube is strapped to the right shoulder. Neither the needle nor the tube go into the spinal cord, just near it, inside the bony canal. An anaesthetic solution can then be put into the tube when necessary.'

*What will it feel like?* 'A tiny prick for the local anaesthetic, then a dull pressure, and some people say a cold feeling when the anaesthetic actually goes in. Occasionally there is a quick electric shock feeling down one leg. Then a numbing—it could be from waist to thighs, but is more likely to be from navel to pelvic floor, or to the pubic bone' (demonstrate). Here, people returning to describe the sensation, or letters of experiences, are useful. 'Each injection starts to wear off after about two hours, and sensation returns very quickly. Sometimes there is a short period before more anaesthetic is put in, and a few very strong contractions have to be managed by breathing techniques and concentration on relaxing. More anaesthetic is then put through the tube, and the numbing sensation is as before with the next injection. In some hospitals the numbness is kept up through the second stage so, unless you have taught yourself to push really well and can put terrific effort into it even without feeling you want to do so (the midwives telling you when you have a contraction) the obstetrician does a forceps delivery. In other hospitals the anaesthetic is "tailed off" towards the end of the first stage, so that only a small amount of numbing is left in the second stage, and the desire to push with each contraction can result in a normal birth. Some anaesthetists, with great skill, can numb any sensation from the pubic bone' (demonstrate) 'to above the navel, and leave the vagina to experience pushing sensations, so pushing is just as effective as with any normal birth.'

Because of the danger of falling blood pressure it should be suggested to the mother that she changes her position from back to side at intervals, especially if she feels at all dizzy when lying on her back. In any case, she may become stiff if she does not move frequently.

*What effects will it have?* 'Forceps deliveries are more common with this technique unless analgesia is used with expertise. Usually a mother has a comfortable labour without concentration or effort, but you must be prepared to cope with a few contractions occasionally. You may also have the contractions and the baby's heartbeat monitored, and because you will have little bladder sensation you may have to be catheterised, that is, a small tube is passed into the bladder to keep it empty. So the midwives will be with you most of the time. You must also know how to use your body correctly in the second stage and push effectively.'

*After-effects.* 'There are usually none. Occasionally headache or backache have been reported.'

### **Ventouse Vacuum Extraction**

This technique of delivery appears to be used very little at the

present time, but it should be briefly mentioned, in case some members of the class have heard of it, or meet somebody in hospital who has been delivered in this manner.

*Why is it used?* 'It is used for all the reasons that forceps are used, except a breech delivery—a long labour, a tired baby or mother, a baby who hasn't turned through the birth canal properly, or a long second stage. It can be used earlier than forceps though, with the head higher, and sometimes when the cervix isn't quite open.'

*How is it used?* 'You have all seen the rubber suction cups which stick on the kitchen wall to hold teatowels. Imagine a suction cup made of metal, and attached by a rubber tube to a machine which can keep up the vacuum inside it. The cup is quite small. The doctor first numbs the vagina and perineum with a local anaesthetic, then puts the cup into the vagina and presses it against the baby's head. The vacuum is built up gently, and the cup fits tightly on the baby's head. Now, whenever a contraction comes, the doctor can help the baby to be born quicker by turning the cup if the head position is not perfect, and pulling a little at the correct angle. With each contraction, mother and doctor cooperate, and the baby is born fairly quickly, but not so speedily as with forceps'.

*What does it feel like?* 'As a local anaesthetic is used, there is no pain as the cup is fitted. After this, it doesn't touch the mother, only the baby's head, but with each contraction there is a sensation of being helped to push more effectively, and a slight feeling of pulling. That is all. As soon as the widest part of the head is born, the vacuum is released, the cup drops off, and the baby is born normally.'

'The main snag is that, although the cup doesn't damage the head at all, the suction pulls the baby's scalp into the shape of the cup, so that when the baby is born he has a round bump like a chignon or bun on his head. This lasts for a week or two in some cases, but does no harm. Many babies have round bumps on their heads with normal labours, anyway, simply by being pressed against the cervix. These usually disappear in a few days, as the "vacuum babies" buns might do also. Just as with any other interference, of course, the baby may have to stay longer in the special nursery.'

### **Caesarian Section**

*Why is it done?* 'The main reasons are because the baby is too big or the pelvis too small for the head to fit in properly, bleeding before labour begins, difficult positions of the baby, a long labour, or a tired baby when it's too early to do a forceps delivery or a vacuum extraction. You can see that these are all good reasons, and if a caesarian section isn't done a healthy baby won't be born. No woman particularly wants a "caesar", but will put up with it for the reward of a healthy baby.'

*How is it done?* 'A surprisingly small cut is made through the abdomen, usually what is called a "bikini cut", in the fold of skin

just above the pubic hair. This means that the scar will be almost invisible when healed. The uterus is opened and the baby delivered, then everything stitched up again. It takes a surprisingly short time and is a very safe operation.'

*How will it feel?* 'Like any routine operation, an injection is given to make the woman feel sleepy and her mouth dry. Then she is taken to theatre and an injection into a vein in her arm sends her to sleep in a few seconds. She wakes, feeling very drowsy, to be told she has a son or a daughter, and probably goes to sleep again immediately. The baby is usually kept in the special care nursery for quite a while because he has had a very speedy delivery and needs time to recover.'

'In a normal labour, pain has vanished when the baby is born, except for stitch discomfort. After a caesarian section a woman sleeps with strong sedatives for the first 12 hours or so, then these are replaced by pain-relieving tablets, which do not take away all discomfort. At the same time the physiotherapist will encourage her to breathe deeply and to cough, and this will be uncomfortable. On the second and third days the abdomen feels full of wind, and this is not very pleasant as it seems to be pressing on the scar. Also, within 24 hours, she gets out of bed, which takes some effort and pain. However, very soon she can be pushed in a wheelchair to see her baby in the nursery, which makes the effort worth while. Usually on the third day she can have her baby with her and breast-feed him if she wants to. By the fourth day she is feeling much better, and will be encouraged by the physiotherapists to walk with a straight back. She may then find it easier to walk and sit than the women who have had lots of stitches after a normal labour. However, a caesarian is an operation, not a normal body function, so she will have to stay in hospital for up to 12 days, and will need gradual convalescence at home, and much more help in the house than after a normal delivery.'

## TWINS

A teacher should be ready to answer questions, and may be asked about the differences in labour in the births of twins. A facile answer would be 'Two for the price of one', but if a member of the class is suspected of carrying twins, or knows she is, details of extra rest in pregnancy, perhaps in hospital, and the possibility of premature births, should be given. A brief description could follow, of the one first stage to open the cervix, the second stage and delivery of the first infant, and the abdominal, and perhaps vaginal, examination to define the presenting part of the second twin. One should describe how the uterus rests before contractions begin

again—usually for anything up to half an hour—then another second stage and delivery. The *Birth Atlas* gives a good pictorial explanation of how identical twins are proved, showing clearly the sharing of the chorion of the membranes, while each infant has his own amniotic sac.

### RETAINED PLACENTA

Occasionally retained placenta will be mentioned, usually because 'it happened to a friend'. One can remind the class of the injection given, at the time of birth, into the mother's thigh, and reassure them that this injection has cut down the numbers of retained placentas to a very small number indeed. However, the simplicity of removal under a light general anaesthetic can be stressed, although perhaps it should be mentioned that if much blood is lost it will be replaced by a blood transfusion. One can emphasise that a transfusion does not mean serious illness, but merely a quick way of making a woman feel fit again.

### THE 'DOMINO' SCHEME

A teacher should find out if local hospitals have started the fairly recent innovation of District Midwife Units in hospital, where a multigravida can have her hospital period cut to a very short time indeed. These units may be called short-stay units, or DOMINO, i.e. DOMiciliary, IN, Out.

A fairly typical routine is that, on having pregnancy confirmed, her general practitioner assesses the multigravida's health and obstetric history, decides that she is fit and checks that she had normal pregnancies previously. He then asks her to see her district midwife, who 'books' her as she would a patient to be delivered at home, and considers the suitability of the home and the help available after the birth. All the patient's notes then are sent to the hospital, again checked, and a bed is reserved in the unit. Throughout pregnancy her antenatal examinations are carried out by her general practitioner and her midwife. When she begins labour she calls the midwife, who cares for her at home until labour is well advanced, then takes her to hospital by ambulance. There she delivers her (although the general practitioner may also be present and may do the delivery) and stays to bath the baby and make the mother comfortable. When she leaves, the hospital provides 'hotel

service' of meals and care. A few hours later the midwife returns, baths them other, and takes mother and baby home again by ambulance, where she continues to nurse them both exactly as if it had been a home delivery.

One can see at once that this is almost a home delivery, and therefore acceptable to the mother, but if any obstetric or paediatric emergency should arise, all the hospital facilities are immediately available.

Another alternative for a multigravida is, of course, the 48-hour discharge, but the personal communication between a mother and a well-known midwife is lost here, due to the usual hospital staffing and off-duty arrangements.

We mention the DOMINO scheme to show how a teacher should 'keep pace' with changing methods; probably many other new methods will be initiated in the future and need to be known. Perhaps, as in the U.S.A., home deliveries will almost disappear.

## CHAPTER 8

# The Puerperium and Baby Care

Families today are small and often widely scattered so that many young couples, unless they are lucky enough to live near friends who have a baby, rarely see or handle one. It is hardly surprising that they are unable to envisage their own baby or to picture what changes it will bring in their lives. They may have fantasies about the baby, the woman seeing it as the smiling, active five-month-old baby of the milk food advertisements, while her husband may skip the whole babyhood phase and think of his son as a three-year-old child learning to kick a ball. Both these parents may be badly shaken when faced with the utterly helpless and infinitely demanding reality. If they have neither talked about nor seen pictures of newly-born babies they may be very shocked by the first appearance of their baby, its cord or afterbirth, and the exciting achievement of birth may be marred for them.

In spite of unreal fantasies and difficult deliveries many parents, particularly mothers, seem to have an immediate upsurge of love when they see their baby for the first time, which deepens as the days go by and they watch with fascination its first tentative efforts to explore its world. Other parents who have also embarked on pregnancy truly believing that it would deepen and enrich their lives, do not always fall immediately in love with their baby. These parents may feel disappointed and even guilty if their feelings do not match up to the lyrical descriptions in the books. Presumably because of the looser physical tie, some fathers only fall in love with their babies as they grow older and begin to communicate with them. At first these men may be jealous of their wife's involvement with the baby and what they see as a transfer of affection from themselves, particularly if the wife is breast feeding.

A few women who have become pregnant by mistake, or who have accepted pregnancy through some social pressure rather than a true desire for motherhood, may be worried by a lack of identification with the baby in utero. They may expect a great change in their feelings after the baby is born; some achieve this, but sadly in a few cases it never happens and these babies are never valued for

themselves but only as some sort of symbol for their mothers. Thus, all parents need to be forewarned that having a baby is rather like having a love affair—sometimes strong and enduring feelings take time to develop.

All women fear for their children and some are actually afraid of them, often simply because they feel clumsy and inept over all these new tasks but sometimes for deep subconscious reasons of which they are not aware. An immature girl who is very dependent on her own mother may strive to please her baby in the way that she has tried to please her mother, and become frightened if her baby shows its disapproval of her by crying or feeding poorly. Occasionally pregnancy reawakens memories of the births of brothers and sisters, the woman feels guilty about her dislike of her own mother in these situations and may transfer this guilt to her own baby, fearing that something will go wrong with it or herself as a punishment of these feelings. Parents who have themselves been brought up in an uncaring, unloving atmosphere find it much harder to love their babies, and in a few cases may dislike them so much that they actually cause them psychological or physical harm.

Multigravidae, particularly those who have one other young child, are often more concerned with the reactions of this child, so much so that they may wonder whether they are ever going to be able to love the new baby as much as the toddler. If they have had a bad first labour experience they may be very frightened of a second but at least they know that they are capable of giving birth, of recovering afterwards and of caring for a child, though they may wonder how they are going to make time for all the extra jobs.

Although most primigravidae say that the sex of their baby is immaterial as long as it is healthy, some women and, more particularly, men do have a great longing for a boy or girl and multigravidae usually hope for a child of different sex from the one they have. Disappointment usually fades quickly but an unfulfilled wish for a child of a particular sex may influence the handling of that child throughout its early years. Both parents like to see in their children characteristics they loved in their own parents or, if they have a good marriage relationship, in each other. Alternatively, they may be quick to censure in their children a trait that they dislike in themselves or in each other.

It is impossible to separate the mother's physical and emotional changes in the puerperium from her developing relationship with

her baby, but an attempt must be made to prepare her for some of them since many women believe that as soon as their delivery is safely accomplished they will immediately regain their figures and become their pre-pregnancy selves again. They forget the tremendous physical, let alone emotional changes, which will take place in them and the stresses of life in hospital which to many is a completely new experience. Most children are jealous of a new baby and multigravidae need help in minimising and coping with the manifestations of this problem and in planning their daily activities to give adequate time to baby and toddler. When they go home or the midwife leaves, all women become easily tired and worried by the demands made upon them. After the first few weeks when their absorption in the baby is beginning to wane, they may be torn between their new functions as a mother and the resumption of a job or other interests.

The following quotations from two letters may help to point out some of these changes. One mother wrote, 'Why had no one ever warned me that having a baby changes you unutterably? I had read thousands of words on how to care for babies, how to help them reach their potential, how to clean their bottoms and mix their feeds, but I hadn't read anything which significantly impressed on me that having a baby would work a major change on my life and on my life style. I didn't understand that she would cause an upheaval, this 8lb volcano at once so helpless and so fiercely demanding, that she would transform our lives and rearrange them.' Another mother said, 'Having a baby puts you into an older age group—your friends, your conversation and your priorities change. I'm already aware that I'm in the next generation, there's an enormous gulf which separates you from being young and in love from being parents and in love.'

How then can we help men and women to set out on this very long voyage of parenthood? How many attitudes must we accept as already formed during childhood, schooldays or love affairs? How much must be left until after the baby is born? Can we do anything during pregnancy to modify unhelpful attitudes and to prepare the parents-to-be or their other children?

We can certainly be aware of some of the psychological factors underlying the changes from 'people in love' to 'parents in love' and discuss changes in life style with the group. We can help these young people a little way along their road to maturity by minimising our

authoritarian teaching and persuading them to think for themselves about many aspects of their new undertaking, whether this be planning the baby's layette, coping with it when it cries, dealing with a jealous toddler or future family planning. Throughout these sessions we can reassure them that although outside help will be available they will quickly come to know their own baby's needs and their own instincts will usually guide them in satisfying these.

We can make sure that new mothers do know what a young baby looks like and what it can do. It should be possible for each member of the group who has not done so before, to hold a small baby. Mothers calling into class at coffee time to talk of their experiences are delighted to have one or two of the group holding and admiring their babies while they talk, or during a visit to the maternity unit permission may be sought for somebody to pick up one of the babies who is not asleep.

We should certainly not neglect practical advice, but keep it short and simple, stressing the broad principles of feeding, cleaning and communicating rather than unimportant details such as which arm is washed first. All this teaching will be repeated after the baby is born whether in hospital or at home. Some midwives report that the mothers retain a lot of class teaching, others that the immediacy of having to cope with their babies is the only stimulus to learning baby care. Whether the class member retains much of the content or not, however, it appears to add to her sense of preparedness of 'becoming a mother', if she has participated in classes on bathing, feeding and handling a baby during her pregnancy.

A talk on the third stage of labour leads simply into the early, then later changes of the puerperium from the mother's, then father's, point of view. It is easy to make the early changes sound like just a list of discomforts from sore tails, afterpains, engorged breasts to postpartum blues, but possible to stress also the positive joys of returning quickly to full health while watching the first fascinating days of the baby's development. We can end with a discussion on the resumption of intercourse, future family planning and the value of the postnatal check.

Finally, and perhaps most important of all, by the way every member of the staff talks to the group, by the illustrations we select and the films we show, we can convey something, not only of the 'problems of parenthood', but of its joys and our acceptance of its tremendous social value to the community.

## PLANNING BABY-CARE INSTRUCTION

As was said in Chapter 1, the major aim of many women who come to antenatal classes is to seek help in understanding and coping with labour. Planning of the baby's layette and equipment must be done early in the course or preferably soon after booking, perhaps at an evening meeting to which both parents are invited. But the amount of further information on baby-care that even an intelligent primigravida can take in seems to be very limited and will often only be accepted after the more immediate problems of labour have been fully discussed. As a woman becomes increasingly clumsy and uncomfortable at the end of pregnancy, she longs, on one hand, to be free of her burden but, on the other, may fear the separation from her child and all the new responsibilities she will have in caring for it outside her womb. We find that it is during these last few weeks that information and discussion on baby-care is eagerly accepted. We must presume a certain amount of inattention, and so put emphasis on important points making the teaching as vivid and varied as possible, an onslaught on the eyes, ears and, if possible, hands.

A suggested syllabus follows.

### Early in Pregnancy

*Planning* the baby's room and surroundings. Safety precautions. Clothes. Equipment—buying the minimum and choosing with care to fit parents' way of life, mother's height, etc. Preparing other children for the birth of the baby.

*Breast* changes during pregnancy. Hygiene—discussion and demonstration of suitable bras, how to put them on and when to wear them. Exercises for muscles of the chest wall underlying the breasts. Discussion of pros and cons of breast feeding. For those who may want to breast feed: care of the nipples, possibility of wearing Waller shells, demonstration of hand positions for expression of colostrum if teacher is in favour of this manoeuvre.

### Later in Pregnancy (after labour classes)

*Bathing*—preferably a demonstration on a real baby or, failing this, an attractive life-size doll handled by the teacher with the tenderness she would use for a baby.

*Breast feeding.* Reassurance that the vast majority of women can breast feed if they really want to. Advantages of putting the baby

to the breast soon after delivery, seeking cooperation of staff. The production of milk and the let-down reflex—how these are influenced by glands and emotions. Getting baby on and off the breast, checking its sucking, winding it. Pleasurable sensations—early difficulties and how to treat them. Books and leaflets for those who want to know more.

*Bottle feeding.* Method of suppressing lactation in local units—some discomfort likely. Demonstration and discussion of different types of bottles and teats, allowing mothers to handle these. Sterilisation of equipment and its importance. Mixing feeds of different types. Clearing away and washing up. Advice on husband and wife practising routine beforehand with their own equipment so that all can be ready for the baby's first feed at home. Points about holding and handling the baby to simulate breast feeding as far as possible. Demand feeding.

*The baby's appearance and activities.*

*The puerperium.* Hospital routine. Physical and emotional changes in the mother. Postnatal exercises. The beginning of the parents' relationship with their baby and his care.

*Parenthood.* Fitting the baby into the home environment with husband, siblings, grandparents. Further physical and emotional changes in the mother including fatigue, with ideas on its prevention. Mother's occasional ambivalence between love of her baby and re-establishment both of her own ego and her life with her husband. Resumption of intercourse, family planning. Postnatal check, cervical cytology. Further development of the baby.

## PRESENTATION AND EXPLANATIONS

### **Planning for the Baby**

This could simply be a talk, but our teaching requirements of 'an onslaught on the eyes, ears and hands' call for a different approach.

We can begin by describing the preparation and effective heating of the baby's room and start a discussion on the merits of putting him straight into it, or of sharing with parents or other children. Continue by making points about choosing a cot, carrycot and pram to suit each family's way of life, illustrated by cut-outs from advertisements and baby magazines. Suggest economy measures, such as cutting down a kitchen chair to make a nursing chair, covering

a cardboard box with gay plastic material instead of buying an expensive toilet basket, or using the kitchen sink instead of a small bath. One of us uses a good photograph of one of her daughters at the age of five months being bathed in a caravan sink to illustrate this point.

A modern layette can then be produced with alternatives, such as babygros and nightdresses, differently shaped vests, cardigans with buttons or bows, nylon and cotton dresses, shaped and plain napkins of different sizes and textures, various styles of plastic pants and disposable napkins. To involve the group in activity they can be asked to choose the clothes they would buy, and how many of each article they would need. A chalk board and chalk is then necessary. The class can be divided into groups of convenient size (perhaps two groups of six to eight members) with one member appointed as 'reporter'. The layette is left with the groups for 10 minutes, and in this time the teacher writes on the board the articles of clothing, with three columns, one for each group and one for herself. The groups decide what they would buy, and the quantity. These are written in the appropriate columns, and the teacher adds her own choice, explaining her reasons as she does so (for example, a winter baby is warmer in an envelope-type vest and a babygro than in a vest with tie fastening and a nightdress). Points where the groups differ from each other and from the teacher usually provide lots of conversation and any multigravida in the class can add practical points from her own experience.

### **Breast and Bottle Feeding**

A discussion on methods of feeding a young baby raises a number of problems for the teacher since she is likely to have strong personal prejudices in favour of using breast or bottle. These may arise from her professional knowledge and observation or more subtly from her personal experience of the joys or disappointments associated with feeding her own babies.

A mother's decision whether or not to nurse her baby, as with her reactions to pregnancy and labour, is not an isolated one; it depends on many factors, such as her upbringing, her feelings about her body, her husband's views and the climate of opinion in the peer group. Public opinion about baby feeding is at present in the process of interesting changes in different parts of the world. In this country before the Industrial Revolution, mother's milk was the

accepted food for a baby and it was a stigma if one was not able to produce enough. This gradually changed with the employment of women outside the home and the mass production of a satisfactory container—the glass bottle. Early in the century the mortality of artificially fed babies was four to six times greater than breast fed babies, but with the improvement of hygiene and sanitation bottle feeding became relatively safe. Women began to accept it as the norm and to regard breast feeding as somewhat 'low class and primitive', an attitude which is prevalent in many developing countries today. The rejection of the primary function of the female breasts reached its height in the United States where breasts became a major sex symbol for enjoyment by husbands not babies.

During the last few years in this country there has been a marked swing back towards breast feeding, at least during the early weeks of a baby's life (Page, 1971). This originated with the better educated mothers, particularly in Social Classes I and II, from their reading and discussions on the physical and emotional benefits to their babies and themselves, and appears to be spreading to other groups. The discovery of the increased risk of thrombo-embolism among mothers when lactation is suppressed by oestrogens has led to the abandonment of these drugs for this purpose. The return to older methods of suppressing lactation, which sometimes give rise to considerable discomfort, may also be a contributory factor in promoting breast feeding.

Professional attitudes are also in a state of flux. At first many midwives and doctors tried to stem the flood of demand for bottle feeding and some went so far as to insist that *all* the mothers in their care should attempt to breast feed. Psychiatrists pointed out that an unwilling mother is not likely to succeed, would feel guilty about her failure and the resulting situation might well do real harm to her relationship with her baby. The opinions of many professionals then changed, particularly those of the younger hospital workers and they themselves began to feel guilty if they over-persuaded a reluctant mother. Some midwives preferred regular artificial feeding using pre-sterilised bottles as a quick way out for themselves. The present situation seems to be that some women who want to nurse their babies do not receive the support and encouragement that they need, and hence the growth of such voluntary associations as the Breast Feeding Promotion Group of the National Childbirth Trust and the La Leche League in the United States.

When planning classes on infant feeding we must first of all get our facts straight, separating those which have a good experimental basis from those which can be traced to wishful thinking on the part of the enthusiasts for one or other method. For example, there is now plenty of evidence to show that the chemical composition of human milk is more suitable for a baby's digestion than cow's milk however modified.

There is a good deal of speculation about the possible long-term harmful effects of the higher protein and mineral content of cow's milk, but as far as we have been able to discover these have so far only been confirmed by animal experiments (Illingworth, 1972). In 1950, Douglas found in a large and carefully controlled study of 4669 babies that bottle-fed babies were more liable to diarrhoea, respiratory infections and measles and that by the age of two years they were slightly heavier. He pointed out, however, that the main risks associated with artificial feeding occurred in poor homes and would be avoided if mothers were more aware of the dangers of infection. Other studies have confirmed these findings but they have been challenged by a recent survey of 334 babies, made by a research team of General Practitioners (1972). There seems little doubt that overweight babies lead to overweight adults with the attendant disadvantages (Creery, 1973) and the risk of a too rapid gain of weight is more common when a too large or too concentrated cow's milk formula is given or solids, particularly carbohydrates, are introduced too early.

The physical effects of breast feeding on the mother, namely a quicker involution of the uterus and a suppression or diminution of ovulation, are widely accepted. At an international conference on the epidemiology of cancer held in Yugoslavia in 1972, it was reported that the tendency to mammary cancer was markedly diminished only in women who's first lactation was early in life.

The psychological effects of breast feeding both on the mother and her baby, though frequently discussed, are very difficult to prove. Evidence is accumulating that frequent contact between mother and baby very soon after birth and at more frequent intervals than those required simply for feeding has a beneficial effect on the mother-child relationship, and that these children begin to communicate at an earlier age (Klaus *et al.*, 1972). Contact, particularly of skin to skin, is much more natural in the breast feeding situation, though its non-acceptance may be at the

root of a decision to bottle feed, but if the value of handling, touching and talking to her baby is pointed out to the bottle-feeding mother there seems no reason why she and her baby should not get many of the benefits of being together.

It may be that the wish to breast feed is an expression of a deeper 'mothering' instinct. In a carefully controlled trial, Niles Newton (1971) found that there was a greater drive for body contact between lactating mice and their young than with mother mice whose nipples had been removed and their young, and suggested that since this drive is a fundamental part of maternal care, it may operate also in human females. In an earlier edition of her book (1963), this author—a well-known American psychiatrist, who is particularly interested in obstetrics—differentiated between the effects on the mother-child relationship of successful breast feeding, a natural simple process, and unsuccessful feeding, characterised by constant worry as to whether the baby is getting enough to eat and the mother finding she is expected to make big changes in her living habits so as to make sure that her supply of milk is plentiful. It is certainly anxieties such as these that make some women opt for bottle feeding, for they cannot believe that their bodies will be adequate to this new task and they fear the responsibility of becoming the sole provider for this helpless little being. These reasons may be more important than the necessity for a speedy return to work or social duties or sometimes just sheer lack of 'motherliness' which is sometimes levelled against those who will not attempt to breast feed. Mothers also frequently say that they like to see how much the baby has taken.

We have heard a number of women who have successfully fed a first baby, saying that they are thinking of giving the new baby the bottle because it will be easier to manage the toddler at the same time and give rise to less jealousy. As with so many other aspects of the coming baby, a little child needs to be prepared beforehand. He must have a simple explanation of the way the new baby will get his milk, demonstrated if possible by a friend's baby or animal or even animal pictures and will then usually accept suckling as quite commonplace, providing it is made clear that the baby is drinking milk that comes *out* of the mother's body not that the baby is *eating* her and that he also, as a baby, drank in this way. When the time comes he will like to have a book read to him or special toys to play with during the feed when he is present (wise

planning will often reduce this to one or two sessions a day). He is likely to want to play at being a baby himself and if allowed to suckle for a few minutes, will quickly decide that a cup is easier for him. Small boys and girls alike will want to play at being mother and will try to nurse dolls and teddies and get cross when no milk is produced. Normal jealousies that are aroused then seem to come from the family changes rather than from the breast feeding situation and are minimal if wisely handled.

Bearing some of these points in mind, how then can we encourage those who are sure that they wish to nurse their babies, influence those who are doubtful, yet still help those who are convinced that bottle feeding is right for them? We might perhaps start by pointing out to the class that a baby's earliest pleasure comes from feeding, and if the mother also derives pleasure from this activity it will give her a tremendous sense of her personal value and importance to her baby and it is likely that a firm emotional closeness will quickly build up between them. On the other hand, if a woman nurses only because she considers it her duty and derives no satisfaction from the process, she is unlikely to make either her baby or herself happy. Most new mothers will have little idea whether or not they are going to enjoy nursing and it is surely our duty to persuade them to keep an open mind and to enthuse them enough for them to have a try. If members of the group come from families where breast feeding is not customary, they may never even have seen a baby at the breast. It is usually easy to rectify this situation by introducing the group to a mother in one of the lying-in wards who is breast feeding or by inviting one to visit the class with her baby. We may, in addition, bring in a bottle-feeding mother and sit back while the group talk. If mothers and babies are unavailable, a film such as 'Babe at the Breast' (see film list) made by the New Zealand Parents Federation, may be a useful way of starting a group discussion and can also be used at a fathers' evening. We can sum up by presenting the pros and cons as honestly and unemotionally as we are able, and this together with a short talk on breast changes and care would make a good introductory class. This might be followed later in the course by two further classes of practical hints on breast and bottle feeding.

Teachers wishing to read more about the most recent ideas on infant feeding are referred to Mavis Gunther's book *Infant Feeding*, which has been recently revised and published as a paperback.

### **The Baby's Appearance and Activities**

There are many publications which describe new babies, ranging from text books of paediatrics to baby food advertisements; each teacher will pick from them the answers to the questions she is commonly asked. Many mothers seem to have found the following points helpful.

'Some months ago we listened to a psychiatrist giving a vivid description of what he felt like when he was born and claiming that it is possible to uncover memories of birth in other people and the influence these memories have had on their lives. Be that as it may, birth must be a tremendous shock for a baby. He has lived for nine months in a warm, moist, dark world, listened to the comforting beat of his mother's heart, been supplied with food and oxygen without any effort. He may have been disturbed occasionally by some movement of his mother's body and wriggled himself into a more comfortable position or been startled by some sudden noise, but basically he has had a very peaceful, protected life.

'During birth all this changes: he is subjected to tremendous pressures as the contractions of the womb mount in intensity, twisted, turned, and squeezed through a narrow canal and finally ejected into a cold, bright, noisy world. He has to learn to eat and breathe and gradually come to accept that he is no longer part of his mother. It is hardly surprising that it takes him a few days, a few weeks or even a few months to settle down to this new existence. We can help him along the path by the way we handle him, but each baby, like each adult, will go his own pace in his own way.

'When you get a chance to have a real look at your baby you'll find his head looks rather big for his body, the forehead flattened and the back elongated, due to pressure during birth. You'll notice two soft spots or fontanelles on his skull where the bones have not yet joined, you can often see a pulse beating through the larger one close to the front of the crown of his head. Don't believe tales that you mustn't touch a baby's head because of these soft spots, for the brain is covered by a very tough membrane, although it is not yet completely bone. His face may disappoint you, unless you expect to see pudgy cheeks, a broad flat nose and an undersized lower jaw, though the fact that he is wrinkled and toothless may give him an uncanny look of one of his grandparents.

'His eyes usually look dark blue and have a blank staring gaze, and he may seem to squint because he has not yet learned to focus. Although his world is a blur he can distinguish between light and darkness but prefers the latter as he is more used to it. His eyelids may be rather puffy.

'His limbs may seem rather puny and undeveloped and his legs tend to be drawn up towards his tummy in their pre-birth position.

His abdomen will look rounded and have the stump of the cord, now an empty tube of skin under a light dressing. Genitals particularly of boy babies tend to look large compared with the rest of the body. Two or three days after birth you may be surprised to find that a girl baby occasionally has a tiny false menstrual period, while babies of both sexes may produce a little milk in their breasts. These changes are due to adjustments in the mother's body chemistry at the end of pregnancy and quickly fade. All babies lose weight during the first few days of life due to loss of body fluids; they are given boiled water, sometimes with glucose, to counteract this, before the mother's milk comes in.

'A baby's skin is thin and dry and may be somewhat blotchy. A deep flush spreads over his entire body if he cries hard and the veins of his head may swell but you will notice no tears as the tear ducts do not function yet. If he is deeply asleep his body loses colour and looks pale and his hands and feet soon become cold if he is not well wrapped up. A few days after birth he may look slightly yellowish because he is getting rid of the extra blood cells in which he has been storing oxygen while inside you. He now no longer needs this because he is breathing oxygen from the air.

'Compared with many animal babies such as foals and calves which must be able to stagger after their mothers a few hours after birth, a human baby may seem incredibly ill-equipped to face the world but he has some skills which will help him to survive. If his face is touched he will turn his head to that side, and a touch on his lips with nipple or finger encourages him to open his mouth and begin to suck anything that is put inside it, and if this is fluid he will swallow it. The most sensitive part of his whole body is his mouth and he gets great pleasure from using it, but do not assume that if he manages to get a finger or a bit of blanket into his mouth he is necessarily hungry—the sucking just makes him feel good.

'He can move freely but cannot yet control any single limb, so that when he cries his whole body jerks and moves. Some babies can lift their heads a little way off the mattress but none of them can hold their heads steady when they are in the upright position, so that their heads feel loose and must always be supported. When very young, they miss the confinement of the womb and like to be held firmly against the mother's body or to be fairly tightly wrapped in a blanket or shawl. They have an inborn fear of being dropped, hence will sometimes quieten when cuddled by an experienced midwife or grandmother instead of being rather gingerly handled by an inexperienced mother. Later on they love to be free of all clothes and to kick on a rug in the sunlight or swim and swish in the bath.

'A baby has one endearing habit which can be made use of when introducing him to another child: he will grasp and cling to any object such as a finger which is put into the palm of his hand. This is said to be the remnant of our monkey ancestry when we had to

cling to our mother's fur as she swung through the trees. However we don't need to tell the toddler this and he thinks that *his* baby is holding *his* hand.

'Babies do not mind a certain amount of noise having been used to the noises inside and outside their mother's bodies, but they are apt to wake and cry if the noise level suddenly changes—an aeroplane passes overhead or the telephone rings. They love to be talked to and sung to (you don't have to keep in tune!) and quickly respond to the tone of a person's voice long before words have any meaning for them. Also they will learn to smile back if their mother smiles at them—their first 'social' response.

'A baby has only one way of telling you that he is unhappy and that is to cry. Some authorities claim that mothers learn to differentiate between cries for help of different kinds, such as food, pain or attention. We have not found this to be true; the crying of a healthy baby certainly varies in intensity from intermittent grizzling to a full-throated yell but it seems to be only through experience and trial and error that the particular need can be satisfied. In a recent American survey of 80 healthy babies whose mothers were encouraged to give them every care, on an average a six-week-old baby cried for two hours and 45 minutes each day. At 10 weeks the crying began to taper off and by three months the average was one hour. The author concluded that some babies cry for exercise and the fun of hearing their own voices, in the same way that some women chatter aimlessly. Even with this comforting thought, most women find it very worrying when their babies go on crying but should remember to check the obvious things first, like hunger, wind, the need for a change of position or clothing or often the need for company, before deciding that the baby is ill or they are bad mothers.

'Some babies undoubtedly enjoy wetting or soiling themselves and only protest if they become sore or cold, others do not like the feel of a dirty nappy; mothers are often much more sensitive than their babies on this point. The first stools are blackish green, then they become bright mustard yellow, but breast-fed babies may only pass a motion every two or three days.

'Remember that a baby's greatest pleasures are suckling, being touched and rocked or patted rhythmically, so that feeding times are enormously important. He needs time to suck, to rest and suck again, to touch, feel and smell his mother's breast if she is nursing him, her hands and face if she is not, to listen to her voice, watch her smile and feel the comfort of her arms as she pats him gently on the back.'

### **The Puerperium**

Some suggestions for describing a newly born baby have already been given; it is also hoped that parents will be able to see pictures

and movies of new babies or better still to look at and hold a young baby before their own labour experience. It is important that the antenatal teacher should be familiar with the routine in the lying-in wards of her local hospitals or the nursing care given by her local midwives. She can then describe briefly the outline of a typical day during the early puerperium and answer queries on points such as 'How soon will my baby be allowed to stay with me?', or 'When can I get up?'.

A talk on the mother's reactions may usefully be introduced by asking members of the group to describe their own, following a previous confinement, or those of friends and relations. Two sharply contrasting patterns of behaviour often emerge from this discussion, one characterised by intense excitement and fulfilment, the other a rather passive relief at the end of an ordeal. Continue thus:

'After a hard labour, particularly if you have needed a lot of medication, you may indeed be weary and disinterested in your baby, wanting only to relax and sleep, but even if you have had a tough time you may, on the other hand, be on top of the world, hungry, and active and need an unwinding period before you can rest. If your husband has not been present you may want to go through your labour, telling him all the good and the bad bits and possibly to work off some resentment either with your own behaviour or that of the staff.

'You may just be happy to know that your baby is safe, healthy and well cared for or you may have an intense longing to see and touch him. You may know quite well that the hospital rules say that your baby must be kept in the nursery for a certain length of time, yet have a nagging doubt that "they" are doing it because there is "something wrong".

'Although you have been longing to be yourself again you may be surprised how empty your body now feels and that you miss the companionship of the baby's movements. At first you may be a bit put off by the appearance of your tummy being "rather like cheap seersucker" as one mother described it to me recently. You will all be longing to get your figures back and if you have done your exercises during pregnancy, go on working hard at them afterwards and watch your diet, I can promise that you will succeed. We will practise a few easy exercises in a moment.

'Your tail may feel bruised or sore if you have had stitches or the lower part of your body may feel numb, so much so that you may be unaware for a long time of a need to pass water. You will have a blood-stained discharge, heavier than a normal period, and may pass a few small clots; these are usually nothing to worry about but the midwives will be keeping an eye on them. They will also check

your pulse, temperature and blood pressure at intervals and measure the position of the top part of your uterus to make sure that it is gradually going down. This involution or shrinking of the uterus is achieved by further contractions of its muscles so you haven't finished with these when your baby is born. You will often feel these contractions at the time that you are feeding your baby because the same hormone that stimulates milk production also stimulates the uterus. They usually pass quickly if you relax and concentrate on breathing through them, but sometimes they do merit the description of after pains and Sister may give you something to help.

'During the next few days you'll have the thrill of getting to know your baby, watching his movements, listening to the different noises that he makes and the way he reacts to your touch and care. It's comforting to know that there is always skilled help to turn to, though in hospital you may get some conflicting advice—in this case the only course is to decide which member of the staff has ideas which you particularly like and which fit the way you feel about your baby and listen mainly to her. If it is your first baby, you will feel very incompetent and hopelessly ham-handed to start with, as baby-care, like any other skill, takes a while to acquire; but by the end of a week you'll be giving the new mothers tips. Some people enjoy the companionship and support of other mothers in a ward, others find the atmosphere too reminiscent of school or camp. Recently delivered women do undoubtedly behave rather like adolescent girls, their emotions are very near the surface and one moment they are giggling helplessly, while the next they may be in bitter tears over some real or imagined problem. You may find you are particularly sensitive and on edge two or three days after your baby is born: this is due partly to the big chemical changes which are taking place in your body as your milk begins to come in, partly to physical discomforts in breasts or tail, and partly a reaction to the big effort of labour and the dawning realisations of your new role and responsibilities. If you suddenly burst into tears or get annoyed with one of the midwives don't feel guilty about it, they will understand, but do remember that they are also women and have problems and emotions too. Above all, if you suddenly feel cross with your baby, don't immediately assume that you are totally unfitted for motherhood but merely that you need a good sleep or somebody understanding to talk to. It's a good idea to warn your husband about these possible ups and downs so that he will understand why you feel like this.

'Adequate rest in hospital is a problem, particularly if you are in a ward with other people and their babies. Even if you are alone, there is a great tendency to go calling or to be continually jumping in and out of bed. Do try to get all the sleep you can and observe any rules about rest periods or limitation of the number of visitors. Anyone who is having her baby as a private patient, where

visiting may be almost unrestricted, needs to take this advice particularly to heart. Perhaps your husband could ask some of the relations to wait awhile; if visitors become overwhelming he may ask the doctor if visiting can be restricted for a while, and inform friends of the "doctor's" decision. He may like to suggest that fruit would be more acceptable than too many flowers.

'If it is not your first baby and child visitors are allowed do let the other children come to see you and the baby, even if they do not like leaving you behind. Psychiatrists agree that it is better for a two-year-old to cry at leaving Mummy than not to see her and feel deserted. If children are not allowed to visit, you may be able to telephone home each day and can certainly take in a series of postcards or little toys, one of which your husband can take home each evening to show your other child that you are thinking about him.'

The film strip 'More Tiny Feet' may be useful to show to multigravidae to help them both in preparing a toddler for a new baby and managing the toddler later. Another strip 'Your First Baby', Part 3, 'Afterwards', may also be useful in promoting discussion about some of the changes in the puerperium; it could be used instead of a talk with expansion on the points which the teacher felt to be particularly important.

### **Postnatal Exercises**

If it is known that a physiotherapist will be available to teach these exercises where the mothers in the group are being delivered, little need be said about them other than to impress their importance on the group. If, on the other hand, this is doubtful, it is very easy to explain how the antenatal exercises can be modified for use after delivery. Here are some ideas for a brief talk.

'There is nothing difficult about these exercises except the will-power to persevere with them, particularly after you go home, as it is fatally easy to say, "I'm tired tonight so I'll do them tomorrow"'. There will often be a physiotherapist to help you but, if not, you may need to get started by yourself. Check with your midwife that all is well, then you can begin as soon as you have had a few hours' rest after your baby is born. Take a few deep breaths in and out, trying to make the air go right down to the bottom of your lungs, expanding your chest much more deeply than you have been able to do for the last few months.

'Move your feet up and down and draw circles in the air with your big toes. Bend and stretch your knees, pressing your legs down hard on the bed. Lie on your back with both knees bent, feet flat on the bed, and try to pull your tummy in towards your backbone,

just as you did when you were pregnant. Try each movement about four times then have a rest. Do the exercises four times a day—it is helpful to tie them with some other activity, say just before each meal, or just after you feed your baby, then you are less likely to forget.

'When you are told that you can get up to go to the toilet, don't wait till the last moment then make a dash—a lot of changes have been going on in your circulation and you may feel odd if you stand up in a hurry. Sit on the side of your bed and swing your legs for a few minutes, stand up slowly, pull your tummy in and brace your undercarriage, then move off. This routine was suggested by Eileen Montgomery in her book *At Your Best for Birth and Later* and has been found very useful.

'Twenty-four hours after you have had your baby you will find that you can pull your tummy in more strongly and can begin to flatten your back at the same time, thus "rocking your pelvis" as you have been used to doing. During pregnancy you did a gentle pull in and release of the muscles, but now you can tighten and tighten your tummy until it won't become even half an inch flatter, hold it while you count four, then relax.

'You can also begin to contract your pelvic floor muscles again, at first just trying to pull the whole muscle sling up, then gradually trying to separate off the back from the front passages. Remember that now we are trying to strengthen the muscles so the contraction needs to be held for a count of four before letting go slowly. You may find that the muscles feel numb and hard to control at first or, alternatively, that the contractions pull on your stitches. Persevere gently because the movement of the muscles and skin improves the blood flow and so helps to diminish swelling.

'When it is time for a rest, turn on your front, arranging two pillows under your tummy and two under your head, so that there is no pressure on your breasts. It will feel good to be off your tail. If you tighten your buttocks hard and relax them about six times, you will begin to strengthen the joints at the bottom of your spine which you will remember tend to slacken during pregnancy and labour and cause backache if they do not return to normal quickly. If any exercise or movement that you do does give you backache, be sure to stop for a few days before you try again.

'When you sit up in bed or in a chair try to sit as upright as possible with the whole of your back supported; a pillow wedged into the small of your back may help. When you are feeding your baby, make sure that both of you are comfortable; if you have a long back you may be happier if he is resting on one or two pillows, particularly if you are breast feeding, so that he can easily reach your nipple without your having to stoop.' The teacher can demonstrate with pillows and a doll. 'When you stand or lift you will now have to adapt your balance once more to your

changed weight.' The teacher recapitulates using examples applicable to the new situation, i.e. putting a baby into a cot or lifting a nappy bucket.

'You can stop doing the breathing and foot exercises after the first two days unless otherwise instructed, but go on with the tummy, pelvic floor and buttock contractions four times a day for at least six weeks, increasing the number of contractions to eight for the tummy and buttocks but keeping the pelvic floor to four each time. After you are up and about again all day there is no need to lie down to do your exercises, as they can all be done while sitting or standing. The important thing is that they *are* done.'

If the teacher knows that competent supervision will be available no further instructions are necessary; if not, she may like to demonstrate some more advanced exercises herself or suggest one of the books at the end of this chapter.

### **The Problems of Being a Parent**

This last session is conducted as a group discussion. It fits well into the latter part of a fathers' evening, so giving both parents the opportunity to think and talk about issues which are of such vital importance to them both, or discuss thoughts that may be arising now they are coming so close to producing this baby. If it is held for mothers only, then multigravidae, who often do not attend all the parentcraft sessions, should be encouraged to stay for this one because their contributions from experience are invaluable.

Discussion could be triggered off by showing a film, such as 'Their First Year', or a film-strip (see Appendix for details). If there are several multigravidae in the group, the strip 'More Tiny Feet' may be appreciated. Alternatively, points from letters could be read, or a quotation from a book, such as the following: 'Take as many cat-naps as you can fit in during the day while the baby sleeps. You're going to need them in the first few weeks. Some days may go like a dream. Others may seem hellish. You're cross with your husband. You can't stand his mother's advice. You're overtired. You hate the baby. It seems to cry non-stop. You're overwhelmed and feel you can't cope' (Fae Winn, in *New Baby* (1973) ).

If the class has truly become a group and are now on easy terms with the teacher and each other, they may get the most benefit simply from being asked what they would like to talk about. If stimulating conversation dries up the leader might like to put any of the following questions.

*'What changes do you think the baby will bring in your life?'* This can lead to a useful discussion on arranging activities, pre-planning to make housekeeping more simple, enlisting help from husbands, grandparents, friends. Suggestions can be made for preventing undue fatigue and the depression which often comes with it, and helping other children to accept the baby.

*'What sort of parents do you think you will be, disciplinarian or permissive?'* Do you think you can find a happy medium between allowing the baby to rule the household or being made to conform rigidly?

*'Do you think you will love your baby all the time?'* It is helpful to describe the mother's emotional see-saw between the baby's demands which are often expressed in apparently irrational crying, her drive to meet these needs as well as those of the rest of the family, and her occasional longing to be free to live her own life again. Mention can be made of the father's ambivalence between pride in his offspring and jealousy of his wife's involvement with it at the expense of his comfort and companionship, and of his feelings of responsibility towards his growing family with an occasional glance backwards to the gay days of bachelorhood. Suggestions can be offered on handling interfering or possessive grandparents.

*'For what problems do you think you should seek help?'* When multi-gravidae are in the group, or members of a previous class have been invited to return to share their problems and solutions, many things will be mentioned which primigravidae, often dreaming of 'the perfect baby' will not have considered.

Here, listed, are some problems which have been discussed in our own classes, most of them mentioned first by a member of the group, some by the teacher. The suggested sources of help are by no means arbitrary, but many parents find their own solutions, or seek help from family and close friends.

#### Problems of the mother

- painful breasts or perineum
- continuing postnatal 'blues'
- real depression
- constant tiredness
- not sleeping, even when she has the opportunity to rest
- disliking, or fearing to handle, her baby for more than 24 hours
- wishing to hurt the baby

- feeling 'always in a muddle', never getting a routine
- fearing her figure will never be back to normal, feeling unattractive.

Problems of the baby—*minor*

- breast hardness
- crying, being 'difficult to wind'
- 'evening colic' or 'three-month colic'
- not sleeping in night
- constipation
- nappie rash
- 'cradle-cap'
- not gaining weight
- gaining too much weight
- thrush
- 'sticky eyes'
- infected umbilicus
- slight rashes of all kinds
- 'taking ages to feed'.

Problems of the baby—*major*

- neonatal cold syndrome
- diarrhoea
- refusing feeds, especially when apathetic or with weak crying
- listless, fretful, persistent crying, even after feeds
- regular vomiting with failure to thrive
- signs of a painful ear, especially if discharging
- fever
- breathing difficulties, severe cold, cough, croup
- signs of abdominal pain, drawing up legs, continuous crying
- any accidents (home safety stressed here).

Problems of the family

- husband feeling neglected
- sexual difficulties; for example, painful intercourse, loss of libido
- housing difficulties
- financial worries.

*Sources of help*

General practitioner: major baby problems; problems of mother or family.

Health visitor: minor baby problems, referring when necessary; problems of mother or family.

Social workers: problems of mother or family (especially with housing and financial problems).

Voluntary organisations: see addresses in bibliography for specialities.

Hospital: any problems referred from the family doctor.

Physiotherapist: figure problems, muscle restoration, referred from general practitioner.

*'How do you think you will feel about making love again?'* This question is rarely raised spontaneously unless the group have become very relaxed but there is usually an immediate response to a discussion of the best time to resume intercourse, changes in libido, the need for a gentle approach to overcome soreness of breasts or from stitches. This can lead to a further question, 'At this moment how many children do you think you would like to have and at what intervals?' Answers from the group soon make it obvious that each will need family planning advice. This is readily available at family planning clinics, postnatal clinics and with family doctors, though in some cases appointments take time to arrange. In some hospitals mothers are interviewed during the lying-in period but this is not a time when a woman is thinking very clearly and in any case it must be a joint decision. A discussion initiated during pregnancy gives the parents a preview of up-to-date methods and their use in different circumstances. They can then think about the acceptability and reliability of the different methods calmly before there is any need for action.

Some teachers will begin this subject by showing a short film, such as 'Happy Family Planning', or a filmstrip (see appropriate section of this book for suggestions), at an evening parents' meeting. This can be followed by a further daytime class for the women alone, when all the products available can be demonstrated and handled, and non-mechanical methods mentioned for those with religious or other objections to appliances, spermicides or pills. Many family planning clinics now make a small charge after the child's first birthday, but make no charge before this time. This makes it easier for a breast-feeding mother to be fitted at first with a diaphragm cap, or to obtain free supplies of sheaths and aerosol foams if she intends to take one of the contraceptive pills after she has weaned the baby.

This subject must be treated sensitively, giving clear descriptions, and being prepared to answer questions, while at the same time

making it perfectly clear that the decision is the parents' own, in conjunction with their medical advisers.

In this class, as in most others, it is often appreciated if the teacher remains behind as the group disperses, so that individual problems can be discussed privately by any member wishing to do so.

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## CHAPTER 9

### Fathers' Evenings and Film Shows

In some parts of the world where marriages are arranged by parents, teenage boys and girls receive earnest instruction about how to conduct themselves as husbands, wives and citizens and the obligations they will later owe as parents to their families as well as to their tribe or nation. In western civilisation there is little preparation for marriage other than the criterion of romantic love and even less in the joys and responsibilities of parenthood. Important efforts are being made to overcome these defects in homes, schools and clubs but it will be a very long time before fathercraft competes with more academic subjects in the syllabuses of boys' schools. It is therefore hardly surprising that many men are abysmally ignorant about the facts of reproduction, not to mention their emotional overtones. Some men retreat from involvement in their wife's pregnancy, labour and care of their baby through fear of showing this ignorance; others are keen to overcome it and come willingly for interviews or classes.

There is no doubt that pregnancy may give rise to stress and anxiety in men as well as women. If the pregnancy was unplanned the man may feel trapped by his future responsibilities, particularly financial ones, and resentful about the coming curtailment of his freedom. Even if the baby is wanted, many men swing between joy in this fulfilment of their virility, anxiety about their wives and worry about their capabilities as fathers. A first pregnancy is particularly critical since it will certainly bring changes to the marriage relationship, the couple will no longer live the world as a pair but will have to learn to live for many years in the old and demanding presence of another human being. In many cases this binds the marriage together and it develops a deeper and more meaningful relationship with the birth of each child, but occasionally a man, particularly one who sees his wife as a substitute mother, is jealous of his child. This puts a great strain on the marriage and in a few, happily rare, instances the birth of a child is the final straw that breaks an unstable marriage.

Women are inundated with information and advice about

pregnancy but men will find very little in books or magazines written expressly to help them. The number of full preparation classes open to couples is infinitesimal; there are a few single classes available during early pregnancy and a fathers' class during late pregnancy is now fairly common. Many men now take advantage of these classes, but many more will not do so through self-consciousness or fear of being regarded as unmanly, their sole means of learning being therefore through their mates at work, their female relations, or second-hand through their wife's classes.

It is inevitable that a man experiences his wife's pregnancy at second hand. The changes in her body gradually help a woman to accept pregnancy and come to know something of her baby. With the exception of the baby's movements which may delight him when they are lying together, the man can only observe and not feel. It takes a loving and sympathetic husband to enter into all the hopes and fears of his pregnant wife and to accept her mood swings, changes in libido and changes in shape. Some husbands treat their wives as if they are made of Dresden china and become over-protective or even dictatorial, while others try to pretend the pregnancy does not exist and expect their wives to behave accordingly.

The father's role in labour has changed through the ages in different countries and is in a state of flux in our own society today. The 'couvade syndrome' in which the man took to his bed with simulated labour pains and received a great deal of care and attention while his wife went off quietly by herself to give birth to her baby was common in ancient Greece and parts of Africa. In other countries it was the custom for the husband to help his wife in labour, for example in Malaya the peasants sit cross-legged behind their wives to support them in the second stage. In Victorian and Edwardian England the whole process of childbearing and rearing, except for the disciplining of unruly offspring, was considered to be the woman's responsibility. It was only after the First World War, and more rapidly since 1945, that men's and women's roles in our society have been changing and growing closer together. Today young people share every aspect of their lives, they work together, play together, housekeep together, it is hardly surprising that many of them wish to be together when the child they have jointly conceived is born. Some couples are temperamentally unsuited to such a situation and it certainly raises problems for

hospital staff, but once they have become used to the idea most observers say that they believe that both men and women derive great benefit from it. In a study done at Charing Cross Hospital, Pawson and Morris (1971) found that 92 per cent of 730 husbands felt that their presence in labour was beneficial to their wives. Raising of morale, improving physical comfort, assistance in carrying out training and improvement of the husband-wife relationship were the reasons offered by the men.

If a man is to give real support to his wife rather than be just a sympathetic and possibly worried onlooker, he must understand something about the process and management of labour and how she may react to them. It is for this reason that some hospitals insist that fathers should attend one or two preparation classes if they wish to be present at the birth of their child. We strongly believe that these classes, if held early enough, can also help men to become more involved in planning for their baby and in making pregnancy a happier time for each of the couple. Many women have said to us after a fathers' class that their husbands were much more interested in their progress and ready to discuss it. Having discovered that labour is not all blood and pain and that there is a great deal they can do to help, they had changed their minds about attending it.

Classes on baby care and child rearing are still only available to a very small minority of men. It is to be hoped that more groups such as those described by Aline Auerbach (1967) in her book *Parents Learn Through Group Discussion* in cooperation with the Child Study Association of America, will be started in this country. Perhaps then more men and women will come to realise how their own behaviour influences the physical and mental development of their children and lays the foundation for their future family life.

### FATHERS' CLASSES

Planning of these evenings will be determined by the numbers to be catered for and the facilities available. We have chosen to describe two types: first, two classes which are part of a course for a small group of 8 to 12 mothers and, secondly, a film evening open to a large group of parents, some of whom may be attending other classes. Careful organisation is needed for any of these meetings: date and time must be advertised well beforehand so that husbands can arrange to be free on that night, clear instructions must be given on how to get to the venue which may well be

different from the antenatal clinic premises; and on the evening clear signposts to the hall and the nearest lavatories are important. Mothers often ask beforehand for an outline of the class including a description of any slides or films which may be shown, and the teacher or any member of the antenatal team should be ready to give this information and mention that if any husband dislikes a picture that is shown nobody will think any the worse of him if he steps out for a smoke. If husbands cannot attend, then mothers, sisters or friends should be welcome. Some estimate of the likely numbers is needed so that sufficient chairs can be provided without the room being uncomfortably crowded.

Several assistants are needed for a large group, and even for a small one at least one helper is useful to talk to parents, project slides or make coffee. A couple who have recently had a baby, particularly if the man has been at the labour, make ideal helpers. The room must be prepared well in advance: a large group requires formal rows but for a small group it looks more friendly if the lines of chairs are curved or, if slides are not being used, are arranged in a circle. Good ventilation is particularly important since pregnant women are sensitive to a crowded stuffy atmosphere and both they and their husbands may be somewhat apprehensive, especially if a birth film is being shown. Having run through the film to check for breaks and having focused a slide projector it is often a good idea in summer to open windows and leave the room unblacked until the last moment. Smoking is probably permissible on these occasions because of its relaxing effect, so a plentiful supply of ashtrays is needed.

We believe that couples should be met at the door by the teacher or her helpers and made to feel welcome rather than being left to drift into an unfamiliar room; they should also be encouraged to fill up blocks of seats leaving some empty ones near the door for the latecomers. A selection of leaflets scattered on the chairs gives the early arrivals something to do and, while exchanging them, the ice is often broken; it must, however, be made clear whether the leaflets are free or must be paid for if people wish to take them away at the end of the evening. In the latter case, a box and a plentiful supply of small change must be available. Refreshments in the form of coffee, tea, or cold drinks and biscuits are a tremendous help in making the evening more sociable, but the cost for a large group is quite high and may need to be subsidised by the Health Service or

the parents. If they are being served, careful preparation is again the watchword but husbands will be only too ready to hand round and help clear up. A chair and a glass of water conveniently placed outside the hall is a wise precaution on film evenings.

### **A Plan for the First Class for a Small Group**

Introductions—it may be interesting to include jobs, since two men may well find that they have this bond in common, but this may be undesirable if the group is intellectually very mixed.

The teacher may wish to add a few words about the clinic, hospital or society such as the National Childbirth Trust which is responsible for the meeting.

A short talk on the physical and emotional changes of pregnancy illustrated with charts, pelvis, doll or slides or a filmstrip such as 'Your First Baby, Part 1', or a film, such as 'Preparing for Sarah'. Questions and comments welcomed throughout as well as at the end.

Coffee break.

Points about antenatal care if not already covered by filmstrip, leading to a discussion on how the group view pregnancy and their daily activities. Minor aches and pains, emotional ups and downs.

The value of preparation classes, with a review of what else they will cover. If the women are already booked into a course this can be very brief, just enough to arouse the men's interest in what their wives will be learning but, if not, a fuller description is needed for propaganda purposes.

A demonstration of good posture, lifting, etc., and some contraction and relaxation exercises while sitting on chairs can illustrate some of these points and cause amusement and a lighthearted atmosphere.

A brief discussion on plans for the baby. Baby clothes are boring to men but their interest can usually be aroused in prams, cots, the height of working surfaces and where the baby is going to sleep.

Finally, the teacher should note the names of any women who are not already booked into subsequent classes and announce the dates and times of further classes including the second evening for fathers, and visits to the wards or talks by additional speakers. She should thank the members of the group for coming and bid them good-night. If she has succeeded in making a good rapport with the group she will get offers of help with the clearing up and should allow at least 15 minutes extra time for the one or two couples who are likely to want a word in private.

### **Second Class for Fathers Towards the End of the Course**

If the group have already met they will be happy to renew

acquaintanceship and exchange notes, otherwise introductions will be needed.

Talk on the physiology and management of labour illustrated with blackboard, charts, knitted uterus, baby and box or pelvis, slides or filmstrip such as 'Your First Baby, Part 2'. If colour slides of an actual delivery are used points about the mother's expression in the second stage, blood-stained liquor, the appearance of the baby and anything else that the teacher has discovered worry parents (these she will only discover from experience) should be described *before* the picture is projected. Questions and comments welcomed throughout.

Further questions and comments initiated by the teacher on the lines of: What did you think of those pictures? Were any points not clear? Did anything worry you?

It is not a bad idea to leave out some important piece of information from the talk, for example when to call the midwife or go into hospital, as this is a question uppermost in most men's minds and may well give rise to a first question.

Coffee break.

Practical hints on husband's help. This can be done as a talk—see suggestions at the end of the chapter—but is much more vivid and useful if done in the form of a brief labour rehearsal. The husbands check the different kinds of relaxation and breathing, learn back and tummy massage and various forms of support. If the teacher feels that she or the parents will be embarrassed by this it is possible to rehearse timed contractions sitting on chairs with the husbands checking their wives. The teacher and her helper can demonstrate massage for the first stage and breathing for the second stage but a demonstration is never so effective as actually trying out the skill.

Discussion usually flows freely but is greatly helped if there is at least one husband present who has had experience of his wife in labour.

Finally, a brief discussion on 'afterwards'. If slides have not been used during the first part of the evening, 'Your First Baby, Part 3' and, in the presence of multigravidae, 'More Tiny Feet' may make a useful starting point. Failing these, a question to an experienced father or a general enquiry as to 'what do you think she will be like after the birth?' will usually get things going. This can lead to a few words about excitements, discomforts and mood swings in the puerperium in hospital and later at home. The wife's need for help in the first few weeks with domestic chores while she learns to cope with the baby, the husband's role in supporting and encouraging her, and the introduction of the baby to grandparents and other children, are all topics to be covered. Then there should be a

look into the future when a reliable baby sitter must be found, and the wife detached from the baby for a few hours so that the couple can begin to go out together again.

The evening can end with good wishes and reminders of ways the group can keep in touch with the teacher and each other, such as letters, phone calls, visits or whatever may be appropriate to the group. Some groups will know, for instance, that they will be having a postnatal reunion.

### FILM EVENINGS

Ideally, parents should come to classes and look at black-and-white pictures and see colour slides of a birth before they make up their minds that they wish to see a film, but unfortunately this is not always possible. Colour films of birth, no matter what angle they are filmed from, are emotional dynamite; they may be reassuring but, on the other hand, they can do a great deal of harm. It is not always easy for doctors and midwives, to whom birth is a common experience, to appreciate its impact on a lay audience. Professionals naturally look first for good midwifery technique, while the audience look first at the expressions on the parents' faces and the appearance of the baby. Some of the parents may have seen birth films at school or on television but that is a very different matter from picturing themselves in a few weeks' time playing the roles of the man or woman on the screen. A few notes on films currently available in this country will be found in the Appendix. The ideal film has not yet been made and perhaps never will be.

Films are expensive to hire and require skilled projection, and there may therefore be a temptation to try out a new film on an audience. We make no apologies for saying that no teacher should show a film to an audience of parents unless she has seen it several times herself and is in broad agreement with its sentiments; she can then introduce the film in an interesting way, perhaps saying a little about its history, giving reasons for a particular procedure or suggesting some special point to look out for. It is possible to lower the emotional temperature of the meeting in this way. For example, in the film 'Birthday' which is shown once a month to parents at the headquarters of the National Childbirth Trust, there is one point in the first delivery filmed where the mother obviously panics, but if the audience are told that the girl's labour had suddenly accelerated and the camera crew were recalled hastily from drinking

coffee in the kitchen and came rushing into the room to film the birth, they accept the situation.

When a film is finished there need be no hurry to turn the lights on and it is often a good idea to suggest that parents discuss it among themselves while the film is rewound. Then the teacher can ask if there are any questions and wait quietly for a few minutes while the first one is formulated.

### **A Film Evening for a Large Audience**

One of us (D.B.) is concerned with a film evening for up to 100 parents held in the lecture theatre of a hospital medical centre, where informality and personal contact is achieved by breaking up the large audience into small groups for tea or coffee and discussion. For this film evening the expectant parents are from several local classes, and from the hospital's own classes. It is held regularly so that the couples attending have a choice of dates. However, it is preferred that they attend towards the end of the wife's class sessions, when we hope they will have practised techniques together and become familiar with the pattern of labour. The dates are given to the women well ahead, so that their husbands can arrange to be free, but it is emphasised that if the thought of a film is really off-putting to either of them, they should not attend. At this point it is stressed that the film is in monochrome, and the fact that it is not in lurid colour seems to allay apprehension.

Clear directions are given on the location of the Medical Centre within the hospital complex. When the couple arrive at the door, they are greeted by pupil midwives, who show them to the lecture theatre, where other staff and local antenatal teachers are waiting to ensure that everybody is comfortably seated. Five minutes are allowed for latecomers, and when everybody has settled in, one of the senior hospital sisters gives a short talk.

First, she welcomes everybody to the hospital and reassures husbands that they are accepted warmly by the hospital staff when their wives are in labour. However, she makes the point that if their wives are in very early labour when admitted, and especially if they are to be sedated for the night, husbands may be asked to go home for a while. They can, if they wish, then phone in often, or will be telephoned by the hospital when their wives need them.

A brief reminder is given about when to come to hospital and of the routine of ringing the hospital first, before getting the ambulance,

so that staff are prepared for the wife's admission. Husbands are warned that they will have to wear a white gown and a mask and told that, if they wish, they can sit on a stool by their wife's left shoulder as the baby is born, thus seeing very little more of the birth than their wife will see. If they wish to see the baby's head as it first appears, they can go to the bottom of the bed and do so. Alternatively, as wives need support especially at the end of the first stage, and several members of staff will be with her in the second stage to help, he need not feel guilty if he 'sits out' for this part and returns immediately the baby is born.

She ends by asking for the husbands' help after the film, to move tables which are stacked at the back of the room, and arrange chairs round them, so that informal groups of couples can be formed in different parts of the room. She says that a member of the staff or a local antenatal teacher will be at each table to answer any questions or discuss interesting points in the film, and that tea, coffee or fruit drinks, with biscuits, will be served at the tables (a small charge is made for this).

One of the antenatal teachers then introduces the film briefly. This film 'Birth' is part of the BBC film series 'Having a Baby', which, unfortunately, is not available for general hire. The point is always made that a film watched is often more traumatic than a delivery witnessed, because in the delivery the husband becomes part of the helping team, has an active role, and is excited at the imminent birth of his baby. As the birth is always filmed from the foot of the bed, husbands are told this, and reminded again that they need not see this angle in real life at all unless they wish to do so. Husbands are also encouraged to take their jackets off and make themselves comfortable (the room is always very warm and it would be a pity if they felt slightly squeamish simply because of the heat). The point is emphasised again that any questions, however small or seemingly trivial, will be answered later.

After the film all the staff help the husbands sort out the tables and chairs. This seems to be a good tension-relieving activity and adds to the casual attitude and friendliness of the small groups. The pupil midwives serve the drinks, then join the groups and often help in answering queries.

The sister or antenatal teacher at each table usually begins by eliciting comments on the film and asks how many of the husbands wish to be with their wives in labour, and if the film has influenced

or changed the decision in any way. We discuss the ways in which a husband can help his wife throughout labour, and by this time the group usually provides its own impetus and discussion flows easily.

Husbands almost always ask for a repetition of the different signs that their wives are ready for hospital. Occasionally we are asked what they should do with a precipitate delivery at home. Usually they say they had not realised how much help they could give, and are determined to practise more with their wives at home.

If the question is not asked in any form, each group is told very clearly about postnatal 'blues' and approximately when they occur. Special emphasis is also made of the fact that any woman will be very tired on return from hospital, and will need a period of time in which all household chores are taken care of, so that she can devote herself to getting used to the baby, planning a routine, and resting to make up for disturbed nights. Each couple is asked what arrangements they have made for this and, if none, whether there is a possibility of husband, sister, mother or mother-in-law 'taking over' the daily routine of the house for a period of one to two weeks. Husbands are told that, by allowing their wives this time for recovery, weariness will pass quickly, but if she has to cope alone from the beginning she may be very tired for months.

The length of discussion varies from half an hour to over an hour, depending on the wishes of the group. As each disperse, at different times, the staff make them feel they have been glad to see them, and will be welcoming when they arrive for delivery.

### SOME OF THE THINGS A FATHER CAN DO TO HELP

Here is an outline of a brief talk to fathers which could follow a description of labour.

'You may both find the last few weeks of pregnancy a bit trying, your wife getting heavy and tired and both of you on edge, half longing for the day when all the waiting will be over, half dreading the beginning of labour. Do plan some short excursions, maybe a meal out, the last time for a long time that you can do these things without a baby-sitter, and encourage visitors providing they don't cause too much work. There is nothing worse for the morale than sitting around all day with nothing to do, feeling like an "unexploded bomb", although it is important to get enough rest.

Encourage your wife to go on practising each day any exercises that she has learned and help by talking her through a pretend

contraction (see Chap. 6) and checking her breathing and relaxation. One doesn't have to be too serious about it all, you are not trying to pass an examination in "How to have a baby", but don't destroy her confidence by teasing.

'After tonight I hope you will both be quite clear about when to go into hospital or to call the midwife. Check that you have a list of the required telephone numbers, 2p and 10p pieces for a telephone, petrol, oil, water and a couple of cushions in the car if you are bringing her in yourself. If you are planning to stay you may be glad of some emergency rations, for although hospitals are good about cups of tea, the odd apple or biscuit can help a lot during a long waiting period. If you are still feeling doubtful about your staying powers do remember that nobody is going to turn a key on you. Unlike your wife you are free to come and go, and in any case the hospital authorities will reserve the right to ask you to leave the room on certain occasions.

'When labour starts let your wife enjoy the natural excitement but calm her down if she is dashing around too much. If you go into hospital together you will be asked to sit in a waiting room while your wife is examined in the admission ward; if labour is progressing she may be "prepared" with a shave, enema and bath. She will then go to a ward or first-stage room where you can join her. By now her contractions may be a good deal stronger and require real concentration on her part. If they are becoming painful she will tend to fight them by tensing her body, screwing up her face and holding her breath. Her first line of defence is to relax and go with the contraction, doing the breathing that she has been taught and allowing her uterus to get on with its job. You can help enormously, first of all simply by being a familiar presence among strange surroundings, secondly by helping her to concentrate and keep going. The midwives will be very kind and will come in and out but they may have several women in labour to look after, while you will only have one. You can arrange pillows to keep your wife comfortable, give her frequent sips of fluid if this is allowed, massage her back or tummy and sponge her face and hands with cold water. At first your wife will probably be glad to talk in between contractions or ask you to read to her if she cannot be bothered with a book herself, but later she will wish to stay quiet. Rest a hand on hers during contractions, for if she is holding yours she will tend to grip it and squeeze you instead of relaxing.

'If she is given pills or an injection and seems to be truly asleep, have a snooze yourself if it is at night and let her be. If she wakes at the height of each contraction and seems to panic, time them carefully, and when you know she is about due for another watch for the tense hands or screwed-up face which are early signs of discomfort, then wake her gently and encourage her to get into her breathing rhythm before the contraction takes hold of her. In any case, the midwives will be glad to have your record of the time intervals between contractions.

'At some stage she is likely to say that she just cannot go on and this is when she will need all *your* strength, *your* trust in the staff and belief in what she has learned. Breathe with her, tap with her, count for her, hand her the gas and oxygen if she is using it. Don't be hurt if she suddenly gets bad-tempered, maybe changes from telling you how wonderful you are to grumbling that it is all your fault. This is the time to watch for signs of the end of the first stage, strong frequent contractions, a feeling of fullness in the bowel and the beginning of the pushing urge. If you are alone together and you notice she is catching her breath or grunting at the height of a contraction, see her through that one by encouraging her to blow out into the mask or to do the broken rhythm breathing (hoo, hoo, ha), then go and find a midwife and report what is happening.

'While the midwife is examining her, slip along to the lavatory, then have a good wash so that you'll be ready to go into the labour ward if you wish. Remember that labour wards tend to be hot and you will be excited, so strip down to a thin cotton shirt before putting on the gown, cap and mask that you will be offered.

'Once she is settled in the delivery room there will be a number of people around helping your wife, but remember she may still need *your* presence and the added encouragement of *your* voice. You may also be able to help by holding the pillows, which tend to slip, or lifting her with an arm round her shoulders when she is pushing or supporting one leg while a midwife holds the other. At a home delivery where the midwife may be single-handed these efforts are particularly appreciated.

'If you can spare a minute from the top end you'll be able to catch a glimpse of your baby's head as it comes down and round the birth canal and cheer your wife on by reporting on how much you can see. Listen very carefully to the midwife or doctor, so that at the critical moment when the head is being born and they say, "Don't push any more, open your mouth and pant", you can reiterate straight into your wife's ear, "Let go, darling, and pant".

'There can be few more exciting moments in a man's life than to be the first to tell his wife the sex of their child.'

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## CHAPTER 10

# The Value of Antenatal Education

In Chapter 1 it was stated that the aims of antenatal education were as follows:

1. To give a woman more confidence.
2. To help her to have a healthy, happy pregnancy and a speedy rehabilitation afterwards.
3. To prepare her for the reality of labour.
4. To integrate her into a group having similar problems to her own.
5. To begin to prepare her to care for her baby.

It is very difficult to assess the effects of any form of health education, particularly one largely concerned with mental well-being, but in this chapter we shall look at some of the evidence that we have as to whether or not these aims are being achieved. Most of the work that has been done concerns the effect of training on labour, and the results are very contradictory, but some studies have been undertaken into other aspects of classes. The evidence submitted here is drawn from various papers referred to at the end of the chapter and from a large scale review of 'Preparation for Parenthood' sponsored by the Royal College of Midwives in 1966. The second part of this study was conducted by a national field survey of representative samples of 1230 mothers of first babies, 284 expectant mothers and a series of group discussions under the guidance of a psychologist. The full report should be read by all concerned with the care of expectant parents, as there is only space here to select a few figures.

In this country where attendance at classes is often not actively encouraged and patients are self-selected, there is a general consensus of opinion that it is the more anxious women who go to classes, but Mandelstam (1971) found that those who attended the classes in her survey did not have a higher introversion rating on the Eysenck personality scale than non-attenders.

### Results of Attempts to Build up Confidence

In the Royal College of Midwives' Survey (1966, p. 44) approxi-

mately 95 per cent of mothers in the antenatal sample found the classes generally helpful. The courses were somewhat arbitrarily divided into three groups: relaxation and exercise classes made up Group A, pregnancy and labour classes Group B, and baby care Group C. To the specific question 'Did the classes give confidence generally?' the answer was 'yes' for 63 per cent of women attending Group A classes, 66 per cent for those attending Group B classes, and 47 per cent in Group C. Similar results were found by Rathbone (1970) who said that when mothers were asked 'How did you find the classes?' they often stressed the extra confidence which the preparation gave them. She found that women trained by some teachers found labour worse than expected while other groups trained by different teachers found it better. She points out that this is probably a reflection of the different tenor of the teaching, some of which was realistic, some perhaps over-sanguine. These findings were challenged by Mandelstam (1971) who found that 'attendance at classes did not appear to make any serious difference to the state of mind of the patient on admission'.

### **Health and Happiness During Pregnancy**

There is very little valid evidence about the effect of classes on pregnancy. Chertok (1959) quotes comparative statistics from various authors on the occurrence of toxæmia, including one from Choupik, the Minister of Health of the Soviet Union. This report, from 10 hospitals in the Moscow region, gives the number of women having late toxæmias as 3.65 per cent among those receiving psychoprophylaxis compared with 6.8 per cent in others.

In 1965 Williams and Odoni reported their observations on a series of 100 women, 77 primigravidae and 23 multigravidae selected only in that they booked consecutively and attended a full course of training. It was noted that at the beginning of the course at approximately 30 weeks of pregnancy, 66 women had backache and 39 of these claimed that during the course of exercises this improved. Of those complaining of cramp at the beginning of the course 72 per cent improved. Due to the lack of controls these figures are not statistically convincing and the improvement may have been due to the advancement of pregnancy, but the trend is interesting.

Happiness during pregnancy, or at any other time, is impossible to measure, but the R.C.M. survey (1966, p. 34) showed that

84 per cent of the women in the antenatal sample were unhappy about some aspect of their pregnancies. The greatest fear, held by 54 per cent, was of having an abnormal baby, 35 per cent were frightened of 'the unknown generally', 29 per cent were frightened of 'making a fool of myself', and 25 per cent of pain. When asked what had helped them most with their worries, 32 per cent said classes, 22 per cent said reassurance from family and friends, and only 15 per cent said professional reassurance (p. 35).

### **Effects on Labour**

In 1965, at a meeting at St Anne's College, Oxford, Professor Peter Huntingford was asked to sum up from the published literature the objective results of training on labour (Conference Report of Obstetric Association of Chartered Physiotherapists, p. 21). He felt that a number of different methods of preparation were concerned and the details were not always adequately described. Several reliable studies of the effects on the complications of labour had been described, but objective observations of the length of labour, the amount of analgesia, and the assessment of pain had not been well controlled. He went on to discuss some of the reasons for these difficulties. The selection and matching of controls present great difficulty, as patients who choose to come to classes are usually self-selected. Non-attenders cannot be given a placebo and the presence of an observer, particularly one who has been concerned with any part of the training, is likely to influence the mother's behaviour. Measurement of the length of labour is another stumbling block, the normal range is very wide and the criteria for the onset of labour vary; trained women, if less anxious, may tend to present later. The amount of analgesics used is not necessarily an indication of the pain felt. It is determined by several interacting factors; the mother's demands will vary according to her pain threshold, her personality, what she has heard about analgesics from her friends and in class, and the criteria for administration of analgesics in the unit. Professor Huntingford felt that an objective assessment of pain was possible only if based on very careful recording of contractions and the mother's reaction to them all through the active phase of labour.

*Objective results.* In spite of these difficulties a number of surveys have been done in this country and many more abroad, and they have had a marked effect on the training and handling of women

in labour. Unfortunately, Grantly Dick-Read did not publish any surveys, but in 1954 Heardman, using preparation based on his methods, published the results of observations on 1000 primiparae, of whom 500 were trained and 500 untrained. They were matched for age and delivered in the same labour wards. It is noted that a physiotherapist was present at the birth of a large majority of the babies though it is not clear whether this applied to untrained as well as trained mothers. The average length of labour was 17 hours for the trained, 20 hours for the controls; the number of forceps deliveries was 47 for the trained, 86 for controls and the number of perineal tears and episiotomies was reduced from 312 to 227 in the trained women.

These results have never been duplicated in this country and surveys by Roberts *et al.* (1953), Peel (1955), Burnett (1956) and latterly Mandelstam (1971) all show no significant difference between the prepared and unprepared groups, with the exception that Roberts found a difference in favour of the trained group in the amount of sedation required. Details of the training in these papers are scanty. Roberts described it as the 'Heardman' method, which included one introductory talk by a doctor. Peel and Burnett simply described the training as 'antenatal exercises'; how these exercises were used or how the women were supported in labour was not discussed.

*Subjective results.* A few attempts have been made to evaluate the subjective results of preparation for labour, notably by Matthews (1965). He compared two matched groups of prepared and unprepared mothers though his criteria for 'preparation' was that the mothers in this group had 'attended at least one relaxation class'. The conditions for the administration of analgesia were carefully laid down and the amount used by each group was almost identical, but Matthews found that the prepared patients stood 'a better chance of a labour free from fear, were more likely to be cooperative, and only 4 per cent of them, as against 23 per cent of the unprepared mothers, found labour more painful than expected'. He concluded with the remark that 'it would probably be fair to say that these figures lend support to the suggestion that relaxation exercises are beneficial in relieving subjective symptoms'. He added that 'neither the writer nor the hospital staff have shown any positive enthusiasm for preparation and the unit itself could hardly be considered ideal for these methods; yet despite these negative approaches, the results

appeared to be significant! One wonders how much more significant they would be if physiotherapist, midwife and doctor took more interest in each other's work; attempting, perhaps, to standardise instructions to women in labour.'

These surveys, from such centres as King's College Hospital, Hammersmith Hospital and the West Middlesex Hospital, have had a profound effect on obstetric thinking in this country during the last 20 years; they are in great contrast to the reports of psychoprophylactic preparation on the Continent and in South America.

*Results from abroad.* Chertok (1959) gave a large number of reports of objective improvements in the course of labour from Malcovati in Italy, Jiminez in Madrid, de Watteville in Switzerland and Trampuz in Yugoslavia, but we have not been able to check the original papers. Lamaze *et al.* (1954) were content to classify results on their own scales of success 'based on the behaviour of the woman as observed by her attendants and on their account as labour proceeds, and also on the objective elements of the perception of uterine activities'. Their course of preparation consisted of nine classes, three on labour given by doctors (one being a psychiatrist) and six by physiotherapists. The results of 863 confinements were as follows: 'Excellent 30.4 per cent, Très Bien 18.6 per cent, Bien 21.6 per cent, Mediocre 25.1 per cent and Chec 4.3 per cent'.

There have, however, been two recent studies, one from Australia and the other from Canada, which appear to have been carefully controlled. Sharley (1970) in South Australia compared 600 trained with 600 untrained women matched for parity and age. The training was carefully described and appeared to follow the Lamaze method closely but it included 'reassurance that the acceptance of drugs was not a criterion of failure'. Results showed that the trained group had shorter labours, less anaesthesia, more intact perineums and the Apgar rating of the babies was higher.

The study from Canada was reported by Murray Enkin at an international conference in London in 1971. It is particularly interesting because, owing to lack of accommodation, it was possible to include in the study one group of patients who had requested but been refused training. Three groups, each of 28 mothers, were matched for age, parity, and 'level of education', the classes programme was modelled on that advocated by the American Society for Psychoprophylaxis in Obstetrics, and husbands and wives

attended together. Patients who took classes required less sedation, less anaesthesia and less operative intervention than either of the other groups. They reported significantly more favourable experiences in labour and delivery than the controls.

*Conclusions.* Although there are now a number of centres in this country where psychoprophylaxis, or at least a good psychological and physical training programme, is in force, and where obstetricians take an active part in the preparation programme and mothers are encouraged to put into practice in labour what they have learned in class, we know of no large-scale survey which has been published recently. One is therefore left with no consensus of opinion about the value of preparation on labour. The reasons for the marked differences in results here and abroad are interesting. Are our principles of evaluation stricter, or is the quality of our classes poorer; is our general obstetric care better so that classes have less impact, or is it a question of the interaction of the personalities of those who come to classes with those who teach, support and deliver them?

### **The Value of the Group**

Many people believe that group therapy is one of the most valuable aspects of classes for expectant mothers and this view was confirmed by the Royal College of Midwives survey (1966, p. 47). Of a sample of 951 mothers, 64 per cent said that the thing they liked best about the classes was the opportunity to 'attend with other expectant mothers'. The value of group discussion in changing attitudes was demonstrated by Friedman in 1971. The 130 women who 'voluntarily expressed the desire for natural childbirth' were interviewed by him at the beginning and end of the course to determine their motivation. He classed such factors as 'strong desire to participate actively for the sheer joy of motherhood' and similar attitudes as positive, and fears and anxieties relating to potential harm during childbirth as negative, and found that 'the training program had altered the importance of the motivating factors from an almost equal distribution at the first interview, to a preponderance of positive over negative factors at the second'.

### **Preparing for the Baby**

In the R.C.M. survey (1966) between 40 and 50 per cent of each sample said that they found instruction in bathing, feeding and

planning for the baby very helpful, although there were criticisms that the subject of the layette was taken too late in the course. A surprisingly high number (41 per cent) did not find talk on the emotional needs of the baby helpful (p. 46).

There is considerable evidence from such organisations as the La Leche League and the Breast Feeding Promotion Group of the National Childbirth Trust that there is a strong association between both pre- and post-natal support and successful breast feeding. The R.C.M. survey sounds a note of warning that during discussion parents 'frequently expressed concern about what they interpreted as their lecturers' strong bias in favour of breast feeding' and their feeling that they would be considered uncooperative or inadequate if they did not conform (p. 46).

### **Classes for Husbands**

The evidence of the value of antenatal education to husbands, either through their wives or directly by attendance at classes, is very scanty. In 1966 only 16 per cent of the R.C.M. survey's total sample were invited to fathers' classes. This situation has undoubtedly changed during the last few years and it is now common practice to include at least one fathers' evening in most courses and the number of joint husband and wife courses is growing. According to this survey 54 per cent of the husbands were said to show very great interest and a further 37 per cent some interest in their wives' classes.

Pawson and Morris (1971) reported a study of 730 husbands who attended the two instruction film and discussion sessions as part of the course in psychoprophylaxis at Charing Cross Hospital. The social grouping of these men showed a very strong bias to the upper groups. It was noted that 61.3 per cent of them were present for the whole of labour, 34.4 per cent of these were upset by some aspect of the labour, but their presence was considered to be helpful by 92 per cent of all the husbands who attended the labours. They gave the following reasons: raising their wife's morale, improving her physical comfort, helping her to carry out her training, and noting an improvement in their relationship with their wives.

### **Negative Results**

It seems that the value of good antenatal education is now proven. There is no direct evidence of the harm that unwise

teaching can do, but many people will describe adverse behaviour that may well result from it.

Although a lack of enthusiasm in the teacher will lend to badly attended, uninteresting classes where little will be absorbed, over-enthusiasm, and a glowing, unrealistic presentation of labour, offering more than can be achieved, will lead mothers to expect too much of themselves. Too rigid or too didactic teaching may cause a woman to feel that she *must* breathe in a particular pattern, or that her labour will inevitably take a particular form. Thus a woman may try too hard to achieve specific breathing, or be unpleasantly surprised by many aspects of her labour.

Reality means emphasising hard work and concentration, and never giving suggestions of 'painlessness' but painting true pictures on as large a canvas as possible. We ourselves would never wish to talk of 'success' or 'failure', except the success of complete teamwork which includes the parents as members of the obstetric team, and results in a healthy and happy mother and child.

To summarise, one of the great challenges to the future of antenatal education is to make classes so real, interesting and relevant to all socio-economic groups that the attendance is no longer mainly from social classes I to III but is a total cross-section of childbearing women.

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## APPENDIX

# Films, Filmstrips, Slides and Useful Addresses

### FILMS

#### **Pregnancy and Birth**

**BIRTHDAY** 16 mm Sound, Colour, 20 minutes

Propaganda for classical 'psychoprophylaxis'. Shows a group of parents being prepared by the method and two of the mothers being delivered, one at home, the other in hospital. Both mothers use the techniques they have learned and are ably supported by their husbands, obstetrician and antenatal teacher. They are allowed to handle their babies immediately after birth and all four parents greet them with great joy.

*Available for hire from National Childbirth Trust, 9 Queensborough Terrace, London W.2. £3.85.*

**BARNET (The Child)** 16 mm Sound, Colour, 60 minutes, English commentary

A Swedish film covering the whole story of conception, pregnancy and birth using the story of a young couple having their first baby. There are points of difference from the British methods of delivery but the husband-wife sequences are delightful.

*Available for hire from National Audio Visual Aids Library, 2 Paxton Place, Gipsy Road, London S.E.27. £6.48 per day.*

**PREPARING FOR SARAH** 16 mm Sound, Colour, Two parts, 20 minutes each part

Part 1: The announcement of pregnancy and subsequent antenatal care of three mothers, two primigravidae and one multigravida. The story of reproduction and birth told in very clear diagrams. Mothers' own preparation chiefly confined to a long visit to Mother-care, relaxation dismissed as an attitude of mind.

Part 2: The deliveries of the mothers from the midwife's angle, all three mothers using a mask throughout the second stage. The husbands are present but only the West African father appears to offer any support.

*Available from Eothen Films, 113-117 Wardour Street, London W.1.  
£6.07 each part per day.*

**READY FOR BABY** 16 mm Sound, Colour, 23 minutes  
Traces preparation classes by various members of the hospital staff for a group of Irish mothers, and shows several of them in the first and second stages of labour. One mother is delivered on her side, another on her back, with a drip in her arm. In each case the baby is filmed from the mother's angle and is joyfully welcomed. No fathers are present.

*Not available for hire. Can be bought from Glaxo Laboratories Ltd, Greenford, Middlesex. £50.00.*

**TO JANET A SON?** 16 mm Sound, Colour, 50 minutes  
This is not a new film and its place has perhaps been taken by 'Preparing for Sarah'. 'Janet' is awaiting the birth of her second child at home, and as the contractions start she recalls her first pregnancy, the care she received and the classes she attended during this time. As her labour continues, she remembers the birth of her first child in hospital Antenatal care is well illustrated and there are a series of beautifully animated diagrams. These show the development of the fetus and the muscular activity of the uterus in labour. Two women are shown giving birth, one in the dorsal and one in the left lateral position—but to the discerning it is obvious that neither of these is 'Janet'.

*Free loan from Farleys Film Library, Glaxo Laboratories Ltd, Greenford Road, Greenford, Middlesex.*

### **The Baby and the Family**

**BABE AT THE BREAST** (1970) 16 mm Sound, Black and White, 20 minutes

This short amateur film made by the New Zealand Parents' Federation describes the value and pleasure of breast feeding for both mothers and babies. The structure and function of the breasts are described and their prenatal care. Mothers of different races are shown feeding a number of delightful babies of different ages, including twins. Points such as the correct position of the nipple, how to tell when the baby is feeding well and how to persuade him to stop, are clearly illustrated.

*Can be hired from the National Childbirth Trust. £2.20.*

**THEIR FIRST YEAR** 16 mm Sound, Colour, 45 minutes

This film was made some years ago, but is still enjoyed by antenatal classes. The changes and development in a baby's first 12 months, with increased response to family life, and at his first birthday party, being already a vociferous, active, full member of the family, are well shown. Early routines, the role of the health visitor, regular check-ups, immunisations, and points for home safety, reinforce earlier parentcraft talks. The teacher needs to mention that, as the film is not new, National Dried Milk is now packaged differently, and welfare codliver oil and orange juice have been replaced by vitamin drops and commercial orange juice. It gives an insight into family life with a baby—mother occasionally at stress, father feeling neglected at first, grandmother sometimes interfering. Also contains points for discussion—at what age should a baby have a pillow, or be 'potted'? A useful, not too glamourised view of the first year of life.

*Available for free loan from Farleys Film Library, Glaxo Laboratories Ltd., Greenford Road, Greenford, Middlesex.*

**CHILD DEVELOPMENT IN THE FIRST YEAR** 16 mm Sound, Colour, 30 minutes

Long and delightful sequences of the spontaneous behaviour of infants. The film shows clearly the basic milestones of development. It seeks to show how much can be learnt about the general progress of a baby, in gross and fine motor movements and in communication, from observation of his behaviour in play situations.

*From Camera Talks, 31 North Row, London, W.1. Purchase price £125. Can be hired for £10.00.*

**GOD BLESS MUMMY AND MAKE HER GOOD** 16 mm Sound, Colour, 30 minutes

This film has a commentary by a well-known paediatrician, and is designed to show children behaving in ways which are totally exasperating and frustrating to their parents and to other adults, creating chaos and becoming extremely messy and noisy, yet what they are really doing is learning, exploring their environment, and making new and exciting discoveries. Conversely, it shows adults making seemingly unreasonable demands on children—bedtime without warning in the middle of absorbing play, eating up a

meal which, although nutritious, has been chopped to an unrecognisable mixture and looks revolting, and expecting 'perfect' behaviour in front of guests. Some controversial discussion material. As, antenatally, women often have an idealised picture of 'the perfect baby' we feel this film could have real value if followed by suggestions on ways in which rooms, floor coverings and furniture could be adapted and safeguarded to allow the child to explore and experiment; it could also lead to discussion on the child as an individual, with his own character and self-respect, not a creature to be moulded entirely to the parents' views of child behaviour.

*Free loan from Farleys Film Library, Glaxo Laboratories Ltd., Greenford Road, Greenford, Middlesex. £115.50 to purchase.*

### **Family Planning**

**HAPPY FAMILY PLANNING** 16 mm Music, Colour,  
10 minutes

This brief cartoon film shows present methods of birth control in a clear, easily assimilated and amusing fashion. There is a musical background, but no speech. Its great advantage, for a multiracial audience especially, is that it has captions in several languages, including Urdu, but is clear enough to be understood without reading ability.

*It can be hired from the Concord Films Council, Nacton, Ipswich, Suffolk, for a £1.00 fee.*

**EVERY BABY A WANTED BABY** 16 mm Sound, Colour,  
35 minutes

This begins with a lecture at a family planning clinic, with diagrams of male and female reproductive systems and fertilisation. It goes on to show clearly each type of birth control at present in use, and evaluates each method. As it was made in 1968, there is perhaps more emphasis on the sheath and diaphragm cap than on contraceptive pills and intrauterine devices. It accepts that religious conviction may influence the choice of family planning methods, and emphasises the importance of individual preferences.

*Available on free loan from L.R. Industries Ltd, Hall Lane, London E.4. If wished, L.R. Industries will supply a projector and a projectionist who is prepared to answer questions.*

**Pregnancy and Birth**

The following are all in colour and are standard 35 mm strips.

**YOUR FIRST BABY, Parts 1-3**

Part 1: Before. Deals briefly with the early symptoms of pregnancy, suitable food and clothing, Health Service facilities, what to prepare for the baby and how both husband and wife can cope with the varying emotions of pregnancy.

Part 2: During. Gives a detailed account of birth in an ordinary hospital setting. Diagrams and pictures of the three stages of labour, showing two primigravid deliveries, one dorsal, filmed from behind mother's shoulder and the other lateral.

Part 3: After. Deals with the puerperium in hospital and makes some points about coping with the new baby at home, family planning and adjustment to life as a family.

**EDUCATION FOR CHILDBIRTH, Parts 1-2**

Part 1: Psychophysical preparation. Illustrates how attitudes towards childbirth develop, and shows a class of mothers practising relaxation and breathing with husbands learning to help.

Part 2: Labour. Traces the labour and home delivery of one of these 'prepared' mothers, ably supported by her husband, and ends with the introduction of the new baby to the two little boys. Both strips emphasise the necessary teamwork between the medical attendants taking part and the parents.

*The above are all available from Camera Talks, 31 North Row, London W.1, on sale or return basis but not for hire. Price of each part £3.50 as strip, as set of slides in boxes £4.50, as set of slides in album or cabinet file £6.00.*

**MORE LITTLE FEET**

A rather lengthy series of pictures showing points to be considered when preparing a toddler for the birth of a new baby and later handling of the toddler when the baby is introduced into the family. Consistency, patience and plenty of love emphasised.

*Available from Farley's Film Library, Glaxo Laboratories Ltd, Greenford Road, Greenford, Middlesex.*

**Baby-Care****BREAST FEEDING**

FEEDING BABY (From breast and bottle feeding to mixed feeds)

**CLOTHING BABY**

EVERYDAY CARE OF YOUR BABY or A DAY IN THE LIFE OF A FOUR-MONTH-OLD BABY (Parents look rather elderly, but this is the fourth child, and good teaching points are made)

SAFETY FOR YOUR BABY (From birth to toddler stage)

HOME SAFETY (Baby's safety in the first year)

HOME SAFETY (The 12 to 15-month-old baby)

There are also two very recent and excellent strips, illustrating the first year of life:

**CHILD DEVELOPMENT IN THE FIRST YEAR**

Part 1: Large Movements (from sitting to walking).

Part 2: Co-ordination (from first smile to playing with toys).

*All available from Camera Talks, 31 North Row, London W.1, on sale or return basis (as above).*

Also available at the present time:

CHOOSING BABY'S LAYETTE

CHANGING BABY'S NAPPY

BATH, DRESS, AND FEED, BABY'S THREE PART ROUTINE

COLD WATER STERILISING FOR BOTTLES AND TEATS

Available shortly:

**BABY'S BATHTIME**

*All available on free loan from Mrs Sylvia Meredith, Health Education Advisory Service, 3 Elgin Road, Sutton, Surrey (preferably through local health education officers).*

**Family Planning**

ABOUT FAMILY PLANNING (A Family Doctor Filmstrip)

A comprehensive film strip, beginning with reproduction and unreliable methods of planning, followed by recommended methods, and a look to the future of population control.

*Produced by the Health Education Audio-Visual for the British Medical Association. Obtained from Health Education Audio-Visual, 24 Bryanston Street, London W.1.*

## FAMILY PLANNING

This strip concentrates initially on the population explosion throughout the world, followed again by clear pictures of unreliable and reliable methods of birth control. Clear, bright simple frames.

*Available from Camera Talks, 31 North Row, London W.1, on sale or return basis (see above).*

Many more films, filmstrips and books on all aspects of sexuality, from early adolescence, through marriage, parenthood and family life, are listed in the following booklets: *Resource List—Responsible Parenthood and Sex Education* and *A Selection of Films for Family Planning Programmes*, both from the International Planned Parenthood Federation, 18-20 Lower Regent Street, London SW1 4PW.

'Book List 1973' from The Family Planning Association, 27-35 Mortimer Street, London W1A 4QW.

## SLIDES

The following slides relate to pregnancy, labour and afterwards.

### BIRTH ATLAS SLIDE SERIES

A set of 22 slides adapted from the Birth Atlas drawings shown against coloured backgrounds. It includes male and female reproductive organs and a breech delivery. Text of accompanying booklet is available in English, French and Spanish.

*Available from Maternity Center Association, 48 East 92nd Street, New York, N.Y. 10028. \$10.50.*

### Slides from Filmstrips

EDUCATION FOR CHILDBIRTH (2 sets)

YOUR FIRST BABY (3 sets)

*In boxes £4.50 per set, in album or cabinet file £6.00 per set from Camera Talks.*

### Gibson Slides

Mrs Joan Gibson of Linnel Hill, Hexham, Northumberland, has several sets of slides showing family relationships and labours, including one of an induced labour, which she is prepared to show to enquirers and to have duplicated on request.

*Slides from the above filmstrips, the Gibson slides and some others are available for borrowing through the National Childbirth Trust, from Mrs Margot*

*Williams, 71 Esher Road, Walton on Thames, Surrey (Esher 63164). These are free (except for postage) to members of the Trust, and for a small charge (approximately 25p per set) to non-members.*

### FILM LOOPS

Short 8 mm film sequences, mounted in a cassette, showing breathing, relaxation, posture, lifting and postnatal exercises are available from Camera Talks at £6.50 each.

### USEFUL ADDRESSES

A teacher should try to collect a 'portfolio' of useful addresses from which added information and help can be obtained by members of her class. Here are a few that we have found useful.

The Borough or County Health Education Officer. Contact can be made through the Area Health Department, Personal Health Section.

Local health visitors and midwives and their method of working (are they area-based or attached to general practitioner teams? The latter is becoming much more common now, so that a teacher, on knowing the name of a class member's GP, can say, 'Your health visitor is . . . and can be contacted at . . .').

Local hospitals, how to get there, and the procedure each requires to inform them when the mother is in labour.

Local ambulance station phone numbers, and which to telephone when in labour. (Information has to be kept up to date. One of us has recently had to tell classes that the ambulance number has changed, and from now on women in labour should dial 999.)

The local Social Services Department. This department now, as well as its many other activities, organises the Home Help Service.

Regional representatives of the Obstetric Association of Chartered Physiotherapists—names obtainable from Mrs Hunter, M.C.S.P., 423 Unthank Road, Norwich, Norfolk. This is an association of British and overseas physiotherapists who have a special interest and training in ante- and post-natal physiotherapy. Members run courses, hold a stock of books, and publish a newsletter.

The nearest Family Planning Centre, with times of opening, appointment systems, and how to make the appointment. This information can be obtained from local clinics or health centres.

The National Council for One-Parent Families, 255 Kentish Town Road, London N.W.5. Telephone 01-267 1361. (Each local authority has a social welfare section to help unmarried mothers, sometimes called 'Welcare'. Information on the whereabouts of this section can be obtained from the above or from local Social Service Departments.)

Gingerbread. (An organisation to help unsupported parents and their children—run by volunteers, who hold group meetings, discuss and help with problems and try to find accommodation.) Information from their headquarters, Gingerbread, 9 Poland Street, London W.1. Telephone 01-734 9014.

Local mothers' clubs and groups. These may be held in church halls, but very many are in clinics and health centres. The mothers have talks, demonstrations, bring-and-buy sales, sometimes keep-fit classes, while the babies and toddlers are cared for by others—in clinics these are trained nurses or nursery nurses, with volunteer mothers. These clubs can be a valuable social outlet to a new mother and often the members can be extremely supportive to each other.

The National Childbirth Trust Headquarters, 9 Queensborough Terrace, London W.2. Tel. 01-229 9319. Since the 1950s the Trust, of which both authors are life members, has encouraged the establishment and maintenance of good antenatal classes and attempted to achieve conditions to make childbearing as satisfying an experience as possible for all women. Lists of Trust leaflets and books can be obtained from headquarters, together with information about the nearest approved classes, details of weekend courses for antenatal teachers and addresses of secretaries of local branches.

The nearest marriage guidance councillors (obtainable from the Headquarters, Marriage Guidance Council, 76A New Cavendish Street, London W.1. Telephone 01-580 1087).

Relaxation for Living. A new venture, started by a National Childbirth Trust member, and now spreading. Groups are taught how to erase tension from everyday life, and deep relaxation is taught by different methods. More information from the group's founder, Mrs Amber Lloyd, Dunesk, 29 Burwood Park Road, Walton on Thames. Telephone Walton 27826.

International Childbirth Education Association. This group, based

in the U.S.A., issues a useful newsheet on preparation for child-birth and allied subjects, reviews new teaching material in English and provides a supply centre from which books published in America and Canada can easily be obtained. Payment is arranged through a bank or by international money order.

ICEA Supplies Center, 1414 N.W. 85th Street, Seattle, Washington 98117.

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